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Washington Apple Pi

Journal of Washington Apple Pi, Ltd.

Volume 10 May 1988 Number 5

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- TimeOut AppleWorks Enhancements - IIGS
- Personal Newsletter & Publish It!
- MacNovice: Word Processing—The Next Generation
- Views & Reviews: MidiPaint and Performer
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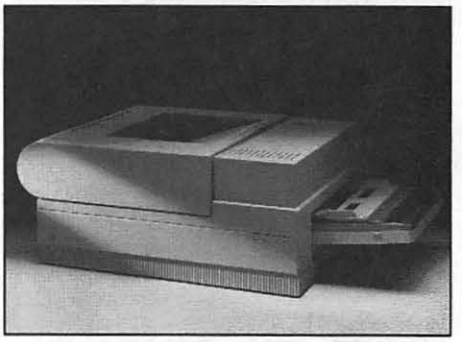

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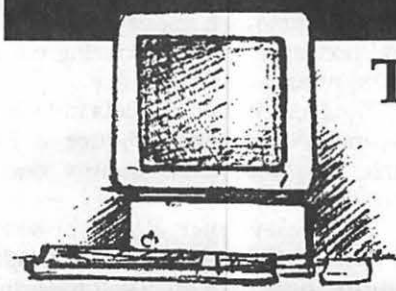

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EDITORIAL

Approximately three years ago, Terry Tufts of the Northern Illinois Computer Society ran the first regional Apple Users Group meeting. Since then it has been held yearly with Apple Computer's support and involvement. Last year it was in Dayton, Ohio and just recently in Ann Arbor, Michigan. Now known as the "National Apple Users Group Conference" (NAUGC), it appears to be institutionalized and will be held next year in Indianapolis, and perhaps in Chicago the year thereafter. Doug Housmann of MacTechnics was the very capable host in Ann Arbor.

The question of a super users group again arose, and based on extensive discussions with representatives from approximately 20 - 30 users groups it is to be brought in the form of a survey questionnaire to the entire users group community (approximately 1000 users groups) for appropriate disposition. Our target dates: the survey form is to be mailed by May 1, returned by respondents by May 15, tabulated by Minna Beissinger of NYMUG, and the results prepared for discussion on August 14 in Boston during the MacWorld Expo. We hope for resolution of such issues as: should there be such a group, should it be a professional society; a PAC for lobbying Apple Computer, dealers, Federal, State and Local Governments; a service organization; a super users group of users groups; what services should it provide and where should the funding come from. Jeff Chasick

contd. on pg 18

PRESIDENT'S CORNER

by Tom Warrick

Some Washington Apple Pi notes: ***Nominations*** for the positions of officers and directors of Washington Apple Pi are being taken/were taken (the "correct" verb tense depends on whether you are reading this during the April meeting or at your leisure at home) after the April meeting. Everyone is encouraged to run, and—whether you run or not—to participate in the management of the Pi by coming to Board of Directors meetings, held on the second Wednesday each month at 7:30 p.m. at the Washington Apple Pi office. ***Elections*** of officers and directors will be held beginning at the ***May general meeting*** on Saturday, ***May21***. If you cannot make it to the meeting, your ballot will be mailed to you. ***Ballots must be received at the Washington Apple Pi office by the close of business on Friday, June17.*** Results will be posted at the June garage sale on Saturday, June25.

In a related reminder: The ***May general meeting*** will be held on the ***third Saturday***, not our usual fourth Saturday. The May meeting will be in the Pre-Clinical Science Building at the Georgetown Medical School off of Reservoir Road. Our ***June meeting***, which may be at the ***Northern Virginia Community College*** just off of Route7 in Annandale (not far from the intersection of I-395 and Route7), will be in our typical ***garage sale*** format. There will also be a special question-and-answer session, if you and other Pi members are interested in participating in one. There will be more details concerning the garage sale in next month's issue of the Washington Apple Pi Journal.

Beginning in July, by popular demand, we hope to return our general meetings to the ***Uniformed Services University of the Health Sciences*** (USUHS) off of Jones Bridge Road in Bethesda. A committee of the Board of Directors was able in the last few weeks to meet with the administration of USUHS to work out some of the problems we have had with them in the past. I am pleased to report that, thanks to the efforts of ***Bruce Field***, ***Leon Moore***, ***Dana Schwartz*** and ***Bernie Urban***, we think that we should be able to meet at USUHS on a more regular basis beginning in July than we were able to in 1987. Georgetown Medical School has been generous to us with its fine meeting facilities, and we wish particularly to thank ***Dr. Lawrence Lilienfield***, our sponsor there. We may continue to meet at Georgetown from time to time if USUHS is not available.

Lynn Trusal brought up an interesting point in his column last month (*Macintosh Bits and Bytes*, April 1988, p. 54) concerning the legality of ***scanning*** graphics into newsletters. Basically, the general rule in copyright law applies to this situation (apropos for the general rule!): ***doing something with a computer***, such as scanning a graphic into a newsletter for general distribution, ***doesn't make what you do more or less legal*** or illegal than if you accomplished the same result without a computer. If it would be legal for you to take a cartoon and cut-and-paste it into your newsletter, it would be just as legal to use a scanner to achieve the same result. A scanner and a computer, after all, are merely more powerful tools than scissors, paste and a photocopier.

That is, however, the easier half of Lynn's question, which is why I answered it first. The harder half is whether the reproduction of a particular graphic (such as a cartoon) in a particular newsletter is itself legal. The answer is—***it depends***. (Surely you were expecting such an answer!) It would be one thing, for example, if the newsletter were something you distributed only to a few friends or family. If you distributed it to a hundred thousand people, on the other hand, or to a several thousand people at $5,000 a year such as some investment newsletters our StockSIG friends can tell you more about, then you should contact the syndicate that holds the rights to the cartoon strip and secure their permission. This will sometimes involve the payment of a licensing fee.

Clip art in disk form is a different subject. Most clip art disks will tell you explicitly what reproduction rights you have when you buy the disk. For example, I have here a disk of MacMemories' "Fish, Fur & Fowl" clip art, which bears a 1985 copyright date, although the images themselves are scanned from art in the public domain, mostly 19th century engravings. It is implicit in the instructions (although the same result would probably follow if the instructions said nothing about use) that you can freely use the images themselves in newsletters. The instruction sheet lists 32 uses for MacMemories' clip art and invites the user to think up more. If you can't copy the clip art into your documents, the disk isn't going to be of much use. The disk itself, however, cannot be freely duplicated. The reason is that the publishers hold what is called a ***"compilation copyright"*** by virtue of their collection and organization of a number of different images onto a single disk. (This is not dissimilar to the copyright that user groups like Washington Apple Pi have on "public-domain" software disks. It should be noted that if the MacMemories did other things to the public-domain art, such as touching it up for computer use, they would be able to claim a copyright on those changes, but not on the original art itself—an important distinction.) The bottom line in deciding whether to buy a disk of clip art is to look in the "documentation" at the rights you have as a user and to judge those rights as if they were as much a part of the product as the images themselves.

This brings us to the great copyright case of the year, if not the decade: ***Apple versus Microsoft and Hewlett-Packard***. There has been much spilling-of-ink in the computer press over this lawsuit, and if you have not heard of it, let me summarize it briefly by saying that Apple is suing its largest software publisher (Microsoft) and H-P, claiming that Windows and H-P's "New Wave" operating systems violate Apple's copyrights in the Macintosh user interface. The copyright claimed is not

contd.

program code, but rather some aspect of the Mac's ***user interface***. Apple also alleges that Microsoft and H-P are engaging in "unfair competition," which, if true, would be a separate ground for damages. Microsoft has countersued Apple, alleging that Apple has hurt Microsoft financially by interfering with its commercially valuable relationships with third parties. Such counterclaims are not uncommon in this type of litigation.

This case raises a number of extremely interesting and important issues in computer copyright law. One of the most important issues in the case is the scope of a license agreement between Apple and Microsoft, in which Microsoft licensed certain rather vaguely defined concepts from Apple for use in Microsoft's ***Windows*** version 1.0. (Microsoft is now developing a different version of Windows, which it contends is sufficiently different from what is proprietary in Apple's interface for the Macintosh. Apple takes a different view.) If Apple is successful, Microsoft would probably have to make certain changes to Windows, likely ***delaying*** its development and the development of third-party applications that rely on it.

Another issue is to what extent the Macintosh user interface (or the "Apple" interface, as some prefer) is derived from the work of others, most notably the work done in the 1960's and 1970's at Xerox's ***Palo Alto Research Center*** (PARC). Obviously, you can get a copyright only for your own work, not someone else's, although (as in the case of clip art), you *can* get a copyright for improving on someone else's work, but only to the extent of the improvements, not the underlying work done by someone else.

A more fundamental issue is the distinction between ***ideas***, which are not copyrightable, and the ***expression*** of ideas, which can be copyrighted. The idea of a zone on a screen into which files are placed prior to being erased is (almost certainly) not copyrightable, but calling that area "Trash" or "Wastebasket" may be. Copyright law is rich with ideas (!) about what is and is not copyrightable because of this distinction—so rich that both sides should be able to point to numerous examples to support their view.

It is not my place here to try to resolve the many issues raised by this interesting case. It would be better for many reasons for this case not to be heard by a court, which could easily go either way on the issue—which is one of the reasons why a ***settlement*** in which both sides save face (with, perhaps, a little money changing hands) is probably the most likely outcome.

As a spectator, it can be equally interesting to watch the ways in which this case is being played in the ***media***. Most interesting is speculation about Apple's motivation for the lawsuit. I have not heard anyone claiming that Apple is actually after monetary damages. Indeed, few commentators seem to suggest that Apple has a grand scheme to stop Windows or New Wave altogether. Instead, everyone is focussing on the delay that Apple's lawsuit will cause, either directly through injunctive relief against Microsoft (so that, for example, Microsoft might have to go back and make changes in Windows that would get around problems found by the courts), or indirectly through intimidation of third-party Windows software developers, who will refrain from investing substantial programming resources on an operating environment that might never make it to market in the next few years. Preliminary reports indicate that if the indirect effect is what Apple is seeking, they already have been successful.

Other commentators have speculated that the ***real target*** of the suit is not Microsoft or H-P, but ***IBM***. To my mind, that hardly counts as "speculation." Two writers at InfoWorld, however, recently wrote that the real "target" of the lawsuit is not Microsoft but Hewlett-Packard. Come on, guys, get real! This lawsuit has been incredible publicity for New Wave (how many of us had ever heard of it before?), but what do you think the relative sales in two years will be of New Wave systems compared to, say, IBM PS/2 systems running OS/2 with Windows or the Windows-derived Presentation Manager? Does anyone think Apple doesn't know this?

Watch when you read accounts of the Apple's claims to see whether the claims are those of Apple's ***public relations*** officials or its lawyers. Someone in Cupertino should see that those two groups do a better job of talking to each other than they have in the past, as things said by the first group can and will be used against Apple in connection with Microsoft's counterclaims.

One of the most interesting aspects of the press coverage is the evident ***hostility of the user community*** toward Apple as a result of bringing this action. Many commentators have suggested that Apple stands to lose goodwill as a result of this action. One commentator, apparently unaware of Apple's history, suggested that the suit shows that the "pinstripe suit" set (my phrase) has somehow "won out" over the "true" Apple spirit. ***Nonsense!***

Such notions forget that Apple has ***always*** litigated vigorously to protect its ***intellectual property rights***, which are far and away the most valuable assets the company has. John Sculley and his fellow corporate officers would be derelict in their duties to their shareholders if they did not act to prevent someone from unlawfully appropriating their property, whether tangible or intangible.

Second, the idea that ***Apple customers*** should get angry at Apple for suing Microsoft strikes me as both petty and irrelevant. Can you honestly say you've ever heard anyone say about computers or any other product, "I won't buy Brand X because its manufacturer is suing one of its largest suppliers?" If you believed in such a rule, you could hardly buy any major consumer product or service these days. ***Who cares?*** It would be one thing, perhaps, if the survival of the manufacturer or the supplier were at risk, but Apple and Microsoft are both industry giants who are fully capable of protecting themselves. There are two groups of people with real grounds to complain, if you ask me. First are the people who were persuaded by IBM or someone else to by IBM PS/2 systems based on their not-yet-released Mac-like capabilities such as were shown on the "M*A*S*H" commercials. (Apple Computer, Inc., of course, owes no duty to such people.) Second, software houses that were developing software for Windows stand to lose perhaps considerable amounts of money if Windows doesn't make it on time. But such companies—and there may be many of them—can and should take steps now to make sure that they protect their interests.

One final thought. This lawsuit may give ***Steve Jobs*** an opportunity for his revenge on Apple and John Sculley. Jobs, you will recall, led Apple to appropriate many of the best ideas about computers developed at Xerox PARC and to turn them into a marketable product, something Xerox could never do. Jobs was also, I believe, involved in the original license between Apple and Microsoft. In any event, Jobs will be a key witness. He has been quoted as saying that he expects to be called as a witness. The question is, Witness for whom? Save two tickets for me at ringside!

EVENT QUEUE

Washington Apple Pi meets on the 4th Saturday of each month (except December and sometimes May) at 9:00 AM. Currently we are in the process of establishing a new "permanent" meeting site, and locations for the time being will be listed on a month-to-month basis. The May 21 (3rd Saturday) meeting will be at Georgetown University, 3900 Reservoir Rd. DC, Pre-Clinical Science Bldg. Rooms LA2 and LA6. The June meeting will be a garage sale, the site yet to be determined. We plan to conduct Apple and Mac Q&A sessions as well as a meeting of the HyperCard SIG in a separate room during the garage sale.

A sign interpreter and reserved seating can be provided for the hearing impaired, but we need 5 business days notice. Call the office.

Following are dates and topics for upcoming months:

May 21* - Apple II: New Software Products
(* 3rd Sat.) - Mac: Omnis 3.3 Database
June 25 - Garage Sale, location TBA

The Executive Board of Washington Apple Pi meets on the second Wednesday of each month at 7:30 PM at the office.

GENERAL INFORMATION

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Membership dues for Washington Apple Pi are $32.00 for the first year and $25.00 per year thereafter, beginning in the month joined. If you would like to join, please call the club office or write to the office address. A membership application will be mailed to you. Subscriptions to the Washington Apple Pi Journal are not available. The Journal is distributed as a benefit of membership.

Mailing Notice: Change of address must be postmarked at least 30 days prior to effective date of move. Journal issues missed due to non-receipt of change of address may be acquired via mail for $2.50 per issue.

Current office hours are:

Monday - Friday- 10 AM to 2:30 PM
Tues. & Thurs. - 7 PM to 9:00 PM
Saturday - 12 Noon to 3:00 PM

Please note that the office is closed on all U.S. Government holidays. Members are asked to place phone calls to the office during the day hours Monday - Friday whenever possible, since only one person staffs the office during evening hours and on Saturday.

AV-SIG NEWS
by Nancy Seferian

The next meeting of AV-SIG (Arts and Video) will be on Wednesday, May 18 at 6:30 PM at Jay Williams Design Co., 1130 - 17th Street NW, phone 728-5932. Ann LaRose, a Macintosh Informational Graphics Artist with Ganett News Service, will speak.

CLASSIFIEDS

WANTED: ProDOS version of Advanced VisiCalc IIe, Apple Writer IIe. Any version of MagiCalc IIe. Call S. Kohudic at (703) 439-8763.

FOR SALE: Computer paper: 8.5 x 11 two-part blank forms with carbon, 1200 sheets; 8.5 x 11 blank with non-removable feed, 1500 sheets; 11 x 14 7/8 lined, 2500 sheets; 11 x 14 7/8 continuous two-part blank forms with carbon, 1300 sheets; 11 x 17 blank, 400 sheets; all for $35. Also Apple 512K Ram board for the Max XL, $100. By the way, anyone interested in a pinball machine? I have three full-szed digital machines for $175 each or $425 for all three. Call Dan Goodman at 933-0416 between 10AM and 9PM.

FOR SALE: Macintosh SE 20 mg, only 4 months old, with documentation and brand new SE carrying case. Includes software: Word 3.01, Excel, HyperCard, MultiFinder, PageMaker 2.0, Superpaint, MacProject, MacDraft, etc. $2600. Call Curtis 244-5961.

FOR SALE: Macintosh 512K Enhanced with standard keyboard, mouse, FannyMac and manuals. Excellent condition. $1000. Call Lou Diamond (301) 948-1547, 9AM to 9PM daily.

FOR SALE: Brand new (never used) Applied Engineering //c System Clock and software. $49. Call 7-10 PM (301) 299-5128.

FOR SALE: Sensible Speller, ProDOS version with 5.25 and 3.5 inch disks, manual, works with AppleWorks—$30. SuperCalc 3a spreadsheet program for Apple //c and //e, manual and 5.25 inch disks—$40. Call (703) 830-3720 before 9 PM.

FOR SALE: Original Apple 5.25 Disk II Drive, $125; Apple //e Mouse, $75; Apple Super Serial Card, $75; Merlin Assembler (//e), $30; Bard's Tale (//e), $15; Sargon III (//e), $15. All in excellent condition. Call John Willis at (301) 694-9410 (eve) or 353-4095 (day).

FOR SALE: Radio Shack Model 4 computer and DMP-Dot Matrix Printer. Computer comes with two disk drives and 12" monochrome monitor. Price includes all cables, VisiCalc, Profile III Plus, Super Scripsit, Mailing List, two games, 50 floppy disks and two storage boxes. Original cost, $2800. Asking price, $600. Microsoft Chart, $35 with original documentation. Call Lynn Trusal at (301) 845-2651 (in Frederick) evenings.

FOR SALE: Apple 12" Hi-Res Mono Monitor for Mac II. Barely used. $250. Call (703) 951-9079, ask for Mike.

FOR SALE: Jasmine Direct Drive 20, 20 MB SCSI hard disk, $550. Call Les at (301) 760-8423.

FOR SALE: Radius Full Page Display for Mac SE, $1225. Call Judd at 881-0838.

FOR SALE: Computer Desk with matching bookcase. Teak veneer, 48" wide and 23" deep with compartments for disk drives. Bookcase attaches to top of desk. Ideal for Apple II or Mac. $225, including a chair! Also, Reflex Plus (Borland Intl.) $125 (retails for $279), and Adobe Illustrator, $250 (retails for $500). Call (202) 543-0095. Leave message on recorder if I am not in.

FOR SALE: MacEnhancer by SoftStyle for Mac+ and SE. One port becomes 4; serial to parallel converter for non-Apple or IBM compatible printers, plotters; 4-way smart data switch. New, in package with complete documentation. $125. (703) 281-5917.

contd.

FOR SALE: Power2 Expand! MASS 50i by Mass Micro Systems. A 49 Mb SCSI Internal Hard Drive for Mac SE, expandable to over 150Mb. Mounts above floppy disk drives, enabling you to keep both. Loaded with shareware and public domains programs and stacks. Free installation. $1195. Call Eli Savada (301) 530-0549 home or (202) 828-4073 work.

COMMERCIAL CLASSIFIEDS

FOR SALE: Quality **SF-171** PageMaker **templates** (8 pages) for $55. All PageMaker versions available. CAll Dan Adkins for information (msg) 202-822-8052.

FOR SALE: Layered Insights, General Ledger Accounting Software, $450. Silicon Beach **Superpaint**, $50. These programs are brand new. Please call (202) 223-6182 weekdays 9 AM to 5 PM.

FOR SALE: Apple 12" Green Monitor and Stand, $50. Call (301) 730-0856.

SCSI Hard Drives - Everex products for sale! **EMAC 20M** hard drive, $499! Call Rusty at Sun Data Corp. (301) 565-8007.

JOB MART

SEEKING EMPLOYMENT

Macintosh SE support provided: Data entry, word processing, database and spreadsheet development, development of custom applications using Pascal. Please consider me for any work you have that I can do part-time on my Mac SE primarily in my own home. I have experience. I would also consider work on an Apple IIGS. Call Jenny Hoerst at (301) 464-5857 between 2 and 9 PM.

HELP WANTED

Part-time Apple Programmer wanted. Fascinating opportunity to work on Apple IIGS programs for Great Game Products. Must have access to Apple IIGS computer. Must know BASIC and/or C. Call Tom Throop at 365-3297, M-F, 9:00-5:00.

Permanent, Full-time Job Opportunities—2 N.Va. locations, salary 20's. **Graphics Designers, Macintosh Wizards.** If you can develop a design from an idea and have a current Secret or TS-SBI, SCI clearance, I have terrific jobs with a prestigious company for you! Please contact Ann Somerset at 340-7009 for immediate consideration.

Downtown Publisher seeks bright and experienced **Technical Consultant** capable of repairing Mac II's and SE's. Must be available on an as-needed basis. Please write or call Jonathan Miller, Thompson Publishing Group, 1725 K Street NW, Suite 200, Washington DC 20006 (202) 872-1766.

Quick Print Shop in Gaithersburg has part-time positions for **Macintosh operators.** Experience with page layout, Word, Draw and Scanner applications required. Familiarity with offset printing process a plus. Extensive customer interface requires positive attitude and a big smile. Reply to Strokes & Strategies, Inc., PO Box 5113, Laytonsville, MD 20879.

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Commworks	60	Smartcom II 3.0	104
Point to Point	80	Straightalk	21
Database			
DBase II	350	Omnis 3+/Express	345
pfs: Workmates(f,r,p,w)	128	Reflex Plus	200
Education			
Computer SAT (HBJ)	28	Calculus; Physics ea.	70
Stickybear Series	ea. 26	SAT Improvemnt Sys	70
Graphics			
Create a Calendar	22	MacDraft	170
Springboard Publisher	92	Powerpoint 3.01	280
Leisure			
Beyond Zork	36	Beyond Dark Castle	35
Star Rank Boxing II	29	Chessmaster 2000	34
Programming			
Applesoft Compiler	131	Lightspeed C 2.11	122
Turbo Pascal 3.0 (CP/M)	53	Lightspeed Pascal 1.1	88
Spreadsheet			
Planner's Choice	29	Analyze	97
Visualizer GS	62	MacCalc	97
Word Processing			
Multiscribe/GS 3.0	70	Mindwrite	185
Word Perfect/GS	100	MS Word 3.01	280

.....New, recently published software.....

APPLE		MACINTOSH	
816/Paint	48	Afinifile	57
Award Maker Plus	26	Bumper Sticker	43
California Games	29	City to City	36
Maniac Mansion	26	Draw It Again Sam	94
Music Studio 2.0 - gs	70	Focal Point	70
Publish It!	79	Foxbase +	235
Ski Crazed	20	Nord & Bert	29
"Timeout Series" by Beagle Brothers	Call	ReadySetGo 4.0	330
		Scoop	330
Topdraw-GS	60	Tops 2.0	149

Ask for a copy of our Apple or Macintosh catalog containing hundreds of other programs. Also, ask about our volume discount prices for 10 or more of any one item.

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* May 1988 *

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 Deadline for Journal articles is Wednesday May 4 (early)	2 PI-SIG 7:30 PM Office	3 Apple II,+,e,c Beginning Tutorial #1 7:30-9PM Office	4 Mac Progmrs. 7:30 PM Office; dPub SIG 7:30 PM PEPCO	5 GameSIG 7:30 PM Office	6	7 Intermediate Applesoft Tutorial 9-12 AM Office
8	9 Introduction to Macintosh Tutorial - Office 7:15 - 10 PM	10 Apple II,+,e,c Beginning Tutorial #2 7:30-9PM Office	11 Executive Board 7:30 PM Office	12 Stock SIG 8:00 PM Office	13	14 Introduction to HyperCard Tutorial 9-12 AM Office
15	16 Intermediate Mac Skills Tutorial - Office 7:15 - 10 PM	17 Apple II,+,e,c Beginning Tutorial #3 (AW) 7:30-9PM Office	18 AV-SIG 6:30 PM 1130 - 17th NW	19 Pascal SIG 8:00 PM Office	20 3rd Saturday --->	21 WAP Meeting 9:00 AM Georgetown U. Pre-Clinical Sci.
22	23 Productivity on Your Mac Tutorial - Office 7:15 - 10 PM	24 Mutual Fund Sub Group (Stock SIG) 8 PM Office	25 Apple /// SIG 7:30 PM Office	26	27	28
29	30 Memorial Day Holiday Office Closed	31				

* June 1988 *

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Mac Progmrs. 7:30 PM Office; dPub SIG 7:30 PM PEPCO	2 GameSIG 7:30 PM Office	3	4 Intro to HyperTalk Tutorial 9-12 AM Office
5 Deadline for Journal articles is Wednesday June 8 --->	6 PI-SIG 7:30 PM Office	7 Apple IIgs Beginning Tutorial #1 7:30-9PM Office	8 Executive Board 7:30 PM Office	9 Stock SIG 8:00 PM Office	10	11 Advanced HyperTalk Tutorial 9-12 AM Office
12	13 Introduction to Macintosh Tutorial - Office 7:15 - 10 PM	14 Apple IIgs Beginning Tutorial #2 7:30-9PM Office	15	16 Pascal SIG 8:00 PM Office	17	18
19	20 Intermediate Mac Skills Tutorial - Office 7:15 - 10 PM	21 Apple IIgs Beginning Tutorial #3 7:30-9PM Office	22 Apple /// SIG 7:30 PM Office	23	24	25 WAP Meeting Garage Sale!
26	27 Productivity on Your Mac Tutorial - Office 7:15 - 10 PM	28 Mutual Fund Sub Group (Stock SIG) 8 PM Office	29	30		

SIGNEWS

Apple IIGS SIG meets on the Monday after the regular WAP meeting. See IIGS SIG Meeting Report elsewhere in this Journal or call Ted Meyer at (703) 893-6845 eves., 7 - 8 PM.

Apple /// SIG meets on the 4th Wednesday at 7:30 PM in the WAP office. The next meeting is May 25.

AppleWorks SIG offers two meeting options: 8:00AM before the regular WAP meeting and 12 Noon after the meeting. Attend either or both.

AV-SIG is the new SIG for arts and video. See their news elsewhere in this issue or call Jay Williams at 728-1009.

dPub SIG (Desktop Publishing) meets on the 1st Wednesday of the month at 7:30 PM in the PEPCO Auditorium at 1900 Penn. Ave., NW. The next meeting is on May 4.

EDSIG is the education special interest group. For information, call Peter Combes at 251-6369.

Fed(eral) SIG - Call the Chairman for details.

GameSIG meets on the 1st Thursday of the month at the office, 7:30 PM. The next meeting will be on May 5.

HyperCard SIG meets after the WAP monthly meeting.

Mac Programmers meet on the 1st Wednesday of the month at the office, 7:30 PM. Next meeting is May 4.

MusicSIG meets on the 2nd Saturday of each month. See their news elsewhere in this issue. Call Bill Bittle (301) 236-9898 for details.

PIG, the Pascal Interest Group, meets on the 3rd Thursday of each month at 8:00 PM at the office. The next meeting will be on May 19.

PI-SIG (Program Interface) meets on the 1st Monday of the month, 7:30 PM at the office. Next meeting is May 2.

Stock SIG meetings are on the second Thursday of each month at the office, 8 PM. The next meeting is May 12.

Telecom SIG - Call the Chairman for details.

WAP HOTLINE For Use by WAP Members Only

Have a problem? The following club members have agreed to help other members. PLEASE, keep in mind that the people listed are VOLUNTEERS. Respect all telephone restrictions, where listed, and no calls after 10:00 PM except where indicated. Users of the Hotline users are reminded that calls regarding commercial software packages should be limited to those you have purchased. Please do not call about copied software for which you have no documentation. Telephone numbers are home phones unless otherwise specified. When requests are made to return calls, long distance will be collect.

Apple II

General	Dave Harvey	(703) 578-4621
Accounting Packages		
Accountant(Dec.Sup.)	Mark Pankin	(703) 524-0937
BPI Programs	Jaxon Brown	(301) 350-3283
BPI & Howardsoft (Tax)	Otis Greever	(615) 638-1525
Dollars & $ense	Barry Fox	(717) 652-4328
Home Accountant	Leon Raesly	(301) 439-1799
APPLE SSC	Bernie Benson	(301) 951-5294
AppleWorks	Ken DeVito	(703) 960-0787
	Bob Martz	(301) 795-5689
	Ray Settle	(301) 647-9192
	Charles Baumgardner	(703) 538-2316
	Ken Black	(703) 369-3366
AppleWorks Data Base	Morgan Jopling	(301) 261-3886
Communications Packages		
ASCII Express	Dave Harvey	(703) 578-4621
ProTerm	Allan Levy	(703) 340-7839
Talk is Cheap/Pt. to Pt.	Barry Fox	(717) 652-4328
XTALK CP/M Comm.	Bernie Benson	(301) 951-5294
Data Bases		
dBase II	Paul Bublitz	(301) 261-4124
	John Staples	(703) 255-6955
dBase II & III	Ray Hobbs (BBS)	(301) 490-7484
	Jim Kellock (day)	(301) 986-9522
dBase II&III,Data Perfect	Leon Raesly	(301) 439-1799
PFS	Bill Etue	(703) 620-2103
Profiler 3.0	Barry Fox	(717) 652-4328
Dvorak Keyboard	Ginny Spevak	(202) 362-3887
Hard Disks		
CMC (not CMS)	Barry Fox	(717) 652-4328
Corvus & Omninet	Tom Vier (BBS)	(301) 986-8085
Corvus	Leon Raesly	(301) 439-1799
Sider	Jaxon Brown	(301) 350-3283
	Otis Greever	(615) 638-1525
Languages (A=Applesoft, I=Integer, P=Pascal, M=Machine)		
A	Louis Biggie	(301) 967-3977
A	Peter Combes	(301) 251-6369
A	Leon Raesly	(301) 439-1799
A,I,M	John Love	(703) 569-2294
M	Ray Hobbs (BBS)	(301) 490-7484
P	Michael Hartman	(301) 445-1583
Forth	Bruce Field	(301) 340-7038
Operating Systems		
Apple DOS	Adam Robie	(301) 460-6537
CP/M	Art Wilson	(301) 774-8043
ProDOS	Leon Raesly	(301) 439-1799
	John Love	(703) 569-2294
	Eric Rall	(301) 596-0004
ProDOS 8 and 16	Barry Fox	(717) 652-4328
Print Shop	Thomas O'Hagan	(301) 593-9683
Newsroom	Carol Thomas	(301) 424-1266
Spreadsheets	Walt Francis	(202) 966-5742
MagicCalc&SuperCalc2.0	Leon Raesly	(301) 439-1799
	Terry Prudden	(301) 933-3065
Telecommunications	Allan Levy	(301) 340-7839
Utilities: ProSel	Barry Fox	(717) 652-4328
Word Processors	Walt Francis	(202) 966-5742
Apple Writer II	Dianne Lorenz	(301) 530-7881
	Leon Raesly	(301) 439-1799
Gutenberg	Harris Silverstone	(301) 435-3582
Letter & Simply Perfect	Leon Raesly	(301) 439-1799
Magic Window and II	Joyce C. Little	(301) 321-2989
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	Gene Carter	(202) 363-2342
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Word Perfect	James Edwards	(301) 585-3002
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Word Star	Art Wilson	(301) 774-8043
	Dana Riel	(301) 350-3283

Apple IIgs

General	Barry Fox	(717) 652-4328
General/Finder	David Todd *	(301) 228-0237
General/Monitor	Neil Walter	(301) 946-4526
General/Paintworks Plus	Paul Tarantino	(703) 455-7670
//e Upgrade	Morgan Jopling	(301) 261-3886
APW	Andy Gavin	(703) 734-3049
	Jim Frison	(703) 525-9395
Deluxe Paint II	Rich Sanders	(703) 450-4371
GS-BASIC	Barry Fox	(717) 652-4328
Multiscribe GS	Ray Settle	(301) 647-9192
Newsroom/Pinpoint	Chuck Ward (til 9 pm)	(703) 830-3720
Telecommunications	Dale Smith	(301) 762-5158
	Allan Levy	(301) 340-7839
& Utilities: ProSel	Barry Fox	(717) 652-4328
VIP-Pro/Multiscribe	Jim Frison	(703) 525-9395
816 Paint/Writr's Ch. El.	Andy Gavin	(703) 734-3049

Macintosh

General	Donald Schmitt	(717) 334-3265
Art and Video	Jay Williams	(202) 728-5932
Data Bases		
Helix	Jim Berry *	(703) 662-0640
	Harvey Levine	(301) 299-9380
MacLion	Mark Miani	(202) 333-0098
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	Jeff Alpher *	(301) 630-2036
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	Tom Parrish	(301) 654-8784
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& Graphics	Jay Rohr	(301) 655-0875
PageMaker	Kate Burton *	(301) 621-6351
	Eleanor Sontag	(301) 251-0695
ReadySetGo	Jim Graham	(703) 370-5737
	Marty Milrod	(301) 464-5981
Graphics	Bill Baldridge	(301) 779-8271
Adobe Illustrator	Ling Wong	(703) 378-5102
Canvas	Bill Baldridge	(301) 779-8271
Full Paint & SuperPaint	Bill Baldridge	(301) 779-8271
HyperCard	John Love	(703) 569-2294
	Holger Sommer	(301) 474-3467
	Rick Chapman	(301) 989-9708
Inside Mac	Jon Hardis	(301) 330-1422
MacDraft	Bob Wilbur	(703) 379-2960
MacDraw	Tom Berilla	(301) 434-3256
	Tom Parrish	(301) 654-8784
	John Spencer	(301) 730-1084
MacMoney	Chuck Sicard	(301) 963-2879
MacProject	Jay Lucas	(703) 751-3332
MacTerminal	Jon Hardis	(301) 330-1422
Magic	Joyce C. Little	(301) 321-2989
Power Point	Herb Schwartz	(301) 983-0534
Programming, MS-BASIC	John Love	(703) 569-2294
Spreadsheets	David Morganstein	(301) 972-4263
& Graphics	Bob Pulgino	(202) 797-0879
Excel	David Morganstein	(301) 972-4263
	Mark Pankin	(703) 524-0937
	Jim Graham	(703) 370-5737
	Dick & Nancy Byrd	(703) 978-3440
Multiplan	John Boblitz	(301) 356-9384
	John Love	(703) 569-2294
Sidekick	Ray Hobbs (BBS)	(301) 490-7484
Telecommunications	Eric Rall	(301) 596-0004
	Allan Levy	(301) 340-7839
ThinkTank/More	Jim Graham	(703) 370-5737
	Tom Parrish	(301) 654-8784
Word	Marty Milrod	(301) 464-5981
WriteNow	Bill Baldridge	(301) 779-8271

General

Franklin & Laser 128	Bob Martz	(301) 795-5689
Games - Apple II	Charles Don Hall	(301) 864-2715
Games - Mac	Perri Mongan	(301) 572-5459
IBM	Ray Hobbs (BBS)	(301) 490-7484
	Leon Raesly	(301) 439-1799
Math/OR Applns.	Mark Pankin	(703) 524-0937
Modems - General	Allan Levy	(301) 340-7839
Hayes Smartmodem	Bernie Benson	(301) 951-5294
Practical Peripherals	Allan Levy	(301) 340-7839
Smartcom I	Harmon Pritchard	(301) 972-4667
Music Systems	Ray Hobbs (BBS)	(301) 490-7484
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	Leon Raesly	(301) 439-1799
MX-80	Jeff Dillon	(301) 662-2070
Okidata	Michael Proffitt	(301) 874-2270
Stat. Packages	David Morganstein	(301) 972-4263
Stock Market	Robert Wood	(703) 893-9591
TCS	Eric Rall	(301) 596-0004
Time-Sharing	Dave Harvey	(703) 578-5621

* Calls until midnight are ok.

Q & A

by Robert C. Platt & Bruce F. Field

Try to stump our Apple II and /// experts by submitting your questions to the WAP Office.

Victory. WAP member Tom Vier has been waging a campaign to reduce the accidental erasure of hard disks. It has borne fruit at Apple. Tom notified this column and other newsletters that the Smartport subcommand for ejecting a 3.5" disk was the same as initializing SCSI hard disks. Hence, if you wrote a program to eject a floppy disk without first checking to see if it was a floppy, you could accidentally destroy all the data on a hard disk. Apple has now addressed this problem by issuing a Technical Note which removes this inconsistency in subcommand number assignments. However, several hard disk driver programs were written under the old standard, and it still a good idea to check the disk's device type before sending an eject command.

Q. What is the IWEM file on the IIgs System Disk?

A. It is a print driver which allows you to use a LaserWriter as if it is an Imagewriter printer. The file contains a postscript program which teaches the LaserWriter to obey the control characters which are normally sent to the Imagewriter. The only drawback to using a LaserWriter in this manner is that the resulting documents do not benefit from the 300 dots per inch resolution of the LaserWriter. If you do not have a LaserWriter, you can delete this file from your startup disks.

Q. How do I run Integer Basic programs on my Apple //e or //c?

A. Integer Basic is a language created by the Woz, Steve Wozniak. It was included instead of Applesoft Basic in the ROMs of the Apple II. Integer Basic program will not work with ProDOS, so you must use a DOS 3.3 startup disk instead of ProDOS. Next, you must load a copy of Integer Basic into RAM memory. Apple distributes Integer Basic on the DOS 3.3 System Master Disk in a file called INTBASIC. Booting the DOS 3.3 System Master Disk will automatically load Integer Basic. To actually execute an Integer Basic program, merely type RUN <program name> where the program name is a file. You can tell whether a file is an Integer Basic program because an I is displayed as its file type when you CATALOG the disk. To switch from Applesoft to Integer Basic type INT at the] prompt. You will see that you have entered Integer Basic by the > prompt. To return to Applesoft from Integer Basic, type FP at the > prompt. Be sure to SAVE any program which you entered or edited before leaving Integer Basic, because the FP will erase the program.

Q. How do I use Integer Basic from a IIgs?

A. The same approach listed above applies to a IIgs. To begin, you must get DOS 3.3 loaded into memory and executing. Place your DOS 3.3 System Master Disk in a 5 1/4" drive. For example, if your 5 1/4" drives are attached to Slot 6, then a PR#6 command will "boot" the computer from the DOS 3.3 disk located in Slot 6, Drive 1. This will read a copy of DOS into RAM and will also execute the HELLO program that automatically loads the INTBASIC file. Typing INT or RUNning an Integer Basic file will take you to the Integer Basic interpreter.

Q. I was browsing through the downloads on a bulletin board system and found a number of files which claimed to be "icons" for many popular applications. Now that I have a copy of them, what do I do with these files?

A. Normally, the Apple IIgs finder, displays a diamond with a hand holding a pencil to symbolize application files. (An application is a file that performs tasks, in contrast with "document files" which are data for that application.) However, various users with an artistic bent have designed custom symbols for particular applications which either look like that application's package or represent the Application's function. To install a custom icon for a file, merely copy the icon (which has a ProDOS file type of $CA0 to the ICONS folder of your startup disk. This icon must have the same name as the application file which it symbolizes. Thus, / BOB/ICONS/APPLEWORKS would be the icon for APPLEWORKS on a startup disk named BOB. The Finder will automatically use the graphic information to draw a custom icon for that file.

Q. What is the maximum number of fonts that I can use at one time on my IIgs?

A. It depends upon the application you are using. Many applications will display a limited number of fonts regardless of how many FONT files you have stored in your SYSTEM/ FONTS subdirectory. Although ProDOS limits you to 51 files or subdirectories in a main volume, ProDOS will permit a much higher number of files to be stored in a subdirectory such as FONTS.

Q. I'm planning to add more storage on my IIgs. Should I buy a 3.5" floppy disk drive, a hard disk, or a battery-powered RAM-card?

A. It depends on how much you value speed. A battery-powered RAM card retains information even after you turn off your computer. During periods when the power is off, the battery keeps the RAM memory functioning. When the computer is on, the battery recharges itself. Because the IIgs requires a great deal of information to be loaded into its main RAM memory whenever you turn it on (or reset it), a hard disk offers a substantial time advantage over a floppy in starting up your machine. A battery-powered RAM card affords more of a speed advantage over a hard disk.

Regardless of whether you use a hard disk or a RAM disk, be sure to backup your files regularly. One factor you should consider in selecting a battery-powered RAM card is the type of battery used. In theory, get batteries that will retain their ability to recharge better than will nickel-cadmium batteries. Since these devices are so new to the IIgs, we don't have experience on how long the batteries will last.

contd.

Q. My Applesoft program is using high resolution graphics. As my program became longer, it appears to be erasing itself by using the graphics. How can I make it use a different part of memory?

A. This is a common problem with long Applesoft programs. Assuming that your program runs under ProDOS 8 and that you are using hi-res page 1, you need to create a second loader program to read as follows:

```
10 REM SET APPLESOFT POINTERS ABOVE
   HI-RES PAGE 1
20 D$=CHR$(4)
30 POKE 103,1:POKE 104,4:POKE 16384,0: REM
   NEEDS A 0 BEFORE START OF PGM TO RUN
40 PRINT D$;"RUN MYPROG":END
```

This program sets the address for loading Applesoft programs to $4000, which is just above hi-res page 1. However, you must reset this address at the end of your program. An easy way to do this is to run BASIC.SYSTEM at the end of your program (assuming that it is on your disk:)

```
9999 PRINT D$;"-BASIC.SYSTEM"
```

If you save the first program as "START.PGM", then RUN START.PGM would load the first program into memory, set the pointers above hi-res page 1 and then automatically load and execute MYPROG.

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Staying in Touch With PC Technology

by Bud Stolker

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USING PRODOS-16 AND THE SIDER ON THE IIGS

by Chuck and Gail Ward

We recently purchased a Sider D2 20 MEG hard disk drive for use with our Apple IIgs. It is manufactured by First Class Peripherals (3579 Highway 50 East, Carson City, Nevada 89701). Our system is configured as follows. We have an Apple IIgs computer with 1.23 MEGs of RAM, 2 Apple 3.5" disk drives, an Apple 5.25" disk drive, an Apple color (RGB analog) monitor and an Imagewriter II printer. The Sider interface card is in Slot 7 of the Apple IIgs, and fits quite easily next to the gs RAM card from Applied Engineering. I mention this because, after reading several ads for RAM cards, this space (or lack of it) was a concern before we bought the Sider.

To use the Sider, we first had to divide the disk into at least 2 volumes, a DOS volume and a ProDOS volume. You can also set Pascal and CPM volumes, but we elected not to do this. We chose the minimum DOS volume size and 2 equal ProDOS volumes. We formatted the disk using the software that comes with the Sider and named our volumes "/H1" (for Hard 1) and "/H2". As all ProDOS tekkies know, volume names must always be preceded by a slash "/". We loaded "AppleWorks" with all the Beagle Brothers Timeout enhancements; "Print Shop GS"; "Sideways"; "Graphic Edge"; "Quicken"; "Point to Point"; and "Copy II Plus" onto volume "/H1"—after creating subdirectories for each. We then copied the data from all our 3.5 inch disks to volume "/H2"—which became our data volume. This set-up was suggested by Lee Raesly, from whom we purchased the Sider, and it is working out quite nicely.

We then needed a method to choose between the many programs on the hard disk. We followed the advice of the *Open-Apple Newsletter* and purchased ProSel, version 3.3, from Glen Bredon (521 State Road, Princeton, NJ 08540, $40). We agree with Paul Kelbaugh (Washington Apple Pi Journal, February 1988, pp.26-27) that ProSel is a marvelous program. It comes with over two dozen useful disk utilities such as copy programs, file maintenance programs, etc. The 60-page Manual is succinct and explicit. Plus, it allows us to enter names and pathnames for all the commercial programs we have purchased and run them from the ProSel menu, which boots after we turn both the Apple IIgs and Sider on. For example, the pathname for AppleWorks is "/APPLEWORKS/APPLEWORKS.SYSTEM/"—after we had created an "/APPLEWORKS" subdirectory on the "/H1" volume and copied all of the files from the Appleworks disk (version 2) to this subdirectory.

Life was good at this point. All we had to do was turn the Apple IIgs on, turn on the Sider, select "boot into ProDOS" from the Sider menu, and the ProSel menu would appear. We could then select any of the programs or utilities available—and they would boot and run quickly. All the reasons why our friends suggested we purchase a hard disk were coming true.

Then version 2.0 of "WordPerfect", which is ProDOS-16 based, arrived in the mail and the trouble began. Although we had created a subdirectory called "/WordPerfect" on volume "/H1"—as instructed in the detailed installation guidelines that came with "WordPerfect", and created the boot-path "/H1/WORDPERFECT/WP.SYS16" as suggested in the documentation, nothing happened. The program would not boot. We were running "WordPerfect" from our 3.5 inch disk drives at this point and realized that this was possibly the very best word processing program ever written for an Apple II and far superior to version 4.1 of "WordPerfect" which we frequently used on that other brand of PC at work. Telephone calls to the WordPerfect Corporation were not helpful. They had never heard of ProSel and suggested putting ProDOS-16 in the root directory of the Sider. This allowed the program to run but we couldn't get back to the Prosel menu and the system crashed.

After several telephone calls, Barry Fox finally gave us the answer. His suggestions, plus a careful rereading of the ProSel documentation (ProSel on the Apple IIgs, p. 16) solved our problem. Below are the steps you need to follow if you want to run any ProDOS-16 based program on a Sider hard disk, using "ProSEL" as the program selector.

1. Copy the file "PRODOS" from the System Disk, version 3.1 to the root directory of the Sider hard disk, in our case "/H1". This is the "loader" file, not the Real PRODOS-16. Its pathname will be "/H1/PRODOS".

2. Copy all the files from the "/SYSTEM" subdirectory of the System Disk, version 3.1, to the root directory of the Sider, i.e., "/H1". Now ProDOS-16 is on the root directory. Its pathname is "/H1/SYSTEM/P16".

3. Rename the file "FINDER" which is now located at "/H1/SYSTEM/FINDER" something else. I called it "FOUND". Possibly it, as well as some of the other files, can be deleted later. I haven't tried yet.

4. Rename the file "START" on the Sider subdirectory "/SYSTEM" to "FINDER". Its pathname is now "/H1/SYSTEM/FINDER".

5. Copy the file "START" from the ProSel "/UTIL" subdirectory to the "/H1/SYSTEM" subdirectory. It can be found on the ProSel 3.5 inch disk (version 3.3) at "/PROSEL/UTIL/START". Its new location on the Sider will now be "/H1/SYSTEM/START". This "START" file allows a "QUIT" command from a ProDOS-16 program to reboot ProSel and then return you to the ProSel menu.

This configuration works very well. We can now store both ProDOS-8 and ProDOS-16 on the Sider and alternate between the programs easily—using ProSel, as well as access all our data files, which are stored on the other ProDOS volume, "/H2". Thanks, Barry.

We prefer to boot directly into ProDOS when we turn the Apple IIgs and Sider on and then have the "Pro.SEL" menu displayed—without having to select "boot into ProDOS" from the Sider main menu. To do this: (a) select "boot into ProDOS" from the main Sider menu; (b) when the "Pro.SEL" menu is displayed, select "Applesoft BASIC"; (c) place the 5.25 inch floppy disk called "Support Utilities from Apple ProDOS" into the disk drive; (d) type "PREFIX /SIDER"; (e) type "-PRODOS.BOOTER"; (f) follow the menu and instruction and choose ProDOS as the startup operating system; (g) turn off both the Apple IIgs and the Sider. Now when we turn our computer

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and Sider on, ProDOS-16 loads, the "Pro.SEL" menu appears and we can run either ProDOS-8 or ProDOS-16 programs from the "Pro.SEL" menu.

APPLE IIGS SIG NEWS
by Ted Meyer

Attendance is picking up at our Monday evening meetings. More than 30 SIG members met Monday, March 28, at 7:00 PM at Kent Gardens Elementary School in McLean, Virginia. The topics covered included: games, icons with the Finder, more games, drawing and painting programs, Q&A's, meeting formats, and desktop publishing software for the IIGS. One SIG member walked away with "Thexder," an arcade-type game for the IIGS, after guessing the number of employees in Apple Computer. The chairman said that there would be more giveaways at upcoming meetings.

Ted Meyer started the meeting with a group discussion of the use of icons within the Finder, and other Finder related topics. Several members described problems with using the Finder with AppleWorks. It was resolved that some SIG members would experiment with this software and report back to the group at the next meeting.

Rich Sanders and Ted Meyer then took turns demonstrating various game software. Rich covered "Mean 18," "Bard's Tale," and "Shanghai" and ably fielded questions pertaining to these games. Ted Meyer covered "Hardball!," with some help from the group, and "Thexder," and gave "Thexder" away after demonstrating his lack of ability in arcade games.

We then looked at "Draw Plus" and "Top Draw", and had a discussion of drawing and painting programs. It was decided that April's meeting would cover these topics in more details.

The Q&A session that followed covered such topics as: IIGS-specific communications programs, desktop publishing software, meeting times and locations, and lots of others.

April's meeting will be on the 25th, from 7:00 PM to 9:30 PM, at Thomas Pyle Intermediate School in Bethesda. From the Beltway, take River Road (Rt 190) east for about 1 mile to Wilson Lane (Rt 188). Turn left on Wilson and go about 1/2 mile to Thomas Pyle on the left. Park in the back. We'll be in the cafeteria.

May's meeting will also be at Thomas Pyle Intermediate School, but will be one week earlier than usual because of the Memorial Day holiday on the 30th. So, on May 23 look for us again at Thomas Pyle Intermediate from 7:00 PM to 9:30 PM.

In June, July, and August we will have our meetings at the Dolley Madison Library in McLean, Virginia. We'll have directions in an upcoming meeting report. After August we'll alternate between a Maryland location and a Virginia location. Hope this isn't too confusing, because we'd really enjoy seeing you at one of our meetings!

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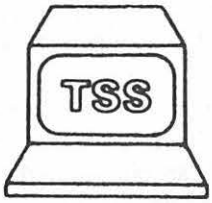

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TIMEOUT APPLEWORKS ENHANCEMENTS ON THE APPLE IIGS

by Chuck Ward

Beagle Brothers, Inc. introduced 7 new programs in late 1987 that provide many much-needed improvements to AppleWorks. All of these programs are copied to the AppleWorks directory and are easily accessible from within AppleWorks itself. The programs include: QuickSpell, a speller utility; SuperFonts, a program that allows printing of AppleWorks documents using the hundreds of GS fonts now available; Graph, a graph-making utility program; UltraMacros, the star of the series that adds powerful macro capabilities to AppleWorks; SideSpread, a program that prints AppleWorks spreadsheets sideways for those of us with a standard-width printer; FileMaster, a set of disk and file utilities that, while they emulate those of the GS System Disk, are accessible from inside AppleWorks; and DeskTools, a well-thought-out collection of desktop tools.

These are not fancy programs. Their beauty is in their simplicity, ease of installation and their ease of use. Two of these, QuickSpell and UltraMacros, should be on the disk of every AppleWorks user. SuperFonts is the most fun of them all, while FileMaster does what the utilities on the System Disk do, just more conveniently, i. e., from inside AppleWorks. You type "OPEN-APPLE-ESCAPE" to access the Timeout menu, then select the utility program of your choice. You can change the names of each program as displayed on the menu and you can sort the menu names, if you want. There are also some configuration choices for the way AppleWorks accesses the Timeout programs.

Installation of the Timeout programs onto your AppleWorks disk is easy. When you install the first Timeout program, you merely boot the disk that comes in the package and select "Install Timeout" from the menu. This copies a file called Timeout.Utilities to the AppleWorks disk. You then must choose the location of the Timeout applications, e.g., on the AppleWorks start-up disk, a RAM disk, a hard disk drive, or a floppy or 3.5 inch disk. Then the location of AppleWorks must also be specified. Finally, from the same menu, you install the Timeout application itself. Incidentally, each of the Timeout applications comes on both 3.5 inch and 5.25 inch floppy disks and all work well on the SIDER 20 MEG hard disk, operating under the ProSEL program selector. The Timeout applications are compatible only with AppleWorks, version 2.0 or later. Beagle Brothers claims that the Timeout applications are compatible with the Applied Engineering and Checkmate desk top expanders. However, the Applied Engineering desktop expander program limits the file size to 3070 lines, more than enough for almost all uses. I've been told that this limitation has been fixed in version 6.

When compared to Pinpoint's programs, which are similar in function (I have both), the Timeout applications are much easier to install, modify and use. In terms of capabilities, I prefer the Pinpoint's macro program (Keyplayer) and their stand-alone spelling utility (Document Checker). I think that Keyplayer is somewhat easier to use and modify than is UltraMacros. Document Checker is an excellent and quick spelling checker, but is not available from inside AppleWorks. Pinpoint's Spelling Checker which does operate from inside AppleWorks is so slow that it is useless for all but one or two page documents. I like the logic of both Pinpoint products, however. They give me the proper spelling of my misspelled words more often than does the Timeout program. I also like the fact that the Pinpoint programs load into RAM upon booting. You can use the Timeout programs from RAM, after initializing a RAM drive and copying the programs and dictionaries into RAM each time you use them. I never bother, however. All in all, I prefer the simplicity of installation and use of the Beagle Timeout programs, even though the Pinpoint programs do have some advantages. I have now switched over to the Timeout series AppleWorks enhancements exclusively.

Timeout Quickspell ($69.95 list), by Alan Bird, is a fast disk-based spell checker that comes with an 80,000 word Random House "Concise Dictionary". It also allows you to add an unlimited number of words to a personalized custom dictionary. It is accessible from AppleWorks by simply typing "OPEN-APPLE-ESCAPE". A menu of the Timeout accessories then appears and you select QuickSpell. It quickly compares the words in your document against a list of common words, then its main dictionary and finally your custom dictionary. It lists any words that are not found in any of the 3 and allows you to edit them in context or from a list—the quickest way. I have found, however, that checking them in context is more efficient and easier. The speller doesn't always give you a correct spelling. It doesn't add my custom word list to the main dictionary like WordPerfect GS (version 2.0) does. It stores them in a separate file. Even more annoying, it doesn't display words from my custom dictionary if I have a misspelled word. It checks the word against the custom dictionary, but won't display alternate spelling from the custom dictionary—the way Pinpoint's spelling checker does. Still it's very fast and gets the job done. The QuickSpell program allows you to correct misspelled words in context, get suggestions from the main dictionary, ignore the highlighted word, add it to a custom dictionary, edit or replace a misspelled word and remove double words. You can also spell-check database and spreadsheet files; to do this, copy these files to the clipboard and then to an empty wordprocessing file. Once they are in the wordprocessing file, you can check the spelling and make any needed corrections manually.

Timeout Ultramacros ($59.95 list), by Randy Brandt, is a powerful macro program that allows you to customize AppleWorks for your own use. It is not easy to learn, but its power makes up for the steep slope of the learning curve. Like any macro program, UltraMacros allows you to let a two-key combination do the work of many keystrokes. I confess that I have yet to really use UltraMacros to its fullest potential. The two most

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important features for my use are the macros that load each time I boot AppleWorks and the ability to load predefined macro sets for special purposes. The "boot macros" that I have defined allow me to type "OPTION-N" and my name, address and the current date appear on a new wordprocessing document. Then the word "Dear " is typed and a bell rings to let me know that I need to enter text from the keyboard. I have predefined macro sets, called "Task File" that allow me to enter pathnames for using the SuperFonts program, for entering data into an AppleWorks database that I maintain on local area restaurants, and to manipulate tax and investment information in several AppleWorks spreadsheet files. I also have defined a Task File to enter pathnames to the various data directories on my Sider hard disk. Some of the predefined macros that come with the program allow me to enter the current date in any document by typing "OPTION-' "; delete ahead of the cursor using "OPEN-APPLE-DELETE"; and "OPEN-APPLE-:" changes the character at the cursor to upper case, while "OPEN-APPLE-;" changes the character at the cursor to lower case. Other macro keys allow you to define numeric and string variables, and use "if-then-else" logic in the variables you define. For experienced programmers (not me), you can define peeks, pokes and calls within macros. Other functions included on the UltraMacros disk allow: setting the rate of cursor blink, adjusting the sensitivity of the mouse response or cancelling it altogether, and setting a screen preserver delay which blanks the screen after a predetermined (1-255 second) delay. A Data Converter program allows you to transfer data between AppleWorks spreadsheets and database files. There are also several specialized macro files on the UltraMacros disk which are not mentioned in the manual, but are alluded to in the "Macro Manual" and "Notes" files on the program disk. Most of the other programs in the Timeout series also have UltraMacros macros, useful to the particular program, on the disk. This program is available as an upgrade for $20.00 for registered owners of Supermacroworks, its predecessor. That's how I got my copy. The manual even lists the differences between the two programs.

Two other programs mentioned either in the "Path Notes" or "Notes" files on the"UltraMacros disk, both written by Randy Brandt, are also worth purchasing. They are Pathfinder, an AppleWorks patch that allows extensive file management within AppleWorks by replacing the disk formatting option; and "Patchmania", a series of AppleWorks patches that solve several of the shortcomings of the original AppleWorks program—including elimination of the requirement to switch disks and enter the current date during the AppleWorks boot routine. Both are available for $20 each from Randy Brandt, Jem Software, P.O. Box 20920, El Cajon, California 92021.

Timeout SuperFonts ($79.95 list) allows you to print AppleWorks documents using Macintosh-like fonts on most dot matrix printers, including the Imagewriter II. You must specify the fonts you wish to use prior to any other page commands, such as margins, etc. Then you type the font number in the text wherever you want the font to begin printing. The program allows you to modify the fonts using bold, italic, underline, shadow, outline and negative modes. You can change the fonts as many times as you wish throughout the document you're printing, preview the page on the screen. Beagle Brothers will also send you a printout of the various fonts (about 50) that come with the SuperFonts disk, if you write and ask for it. All three of the fonts disks (over 200 fonts) in the Washington Apple Pi IIgs Disketeria (WAP2009, 2010 and 2011) will work with the SuperFonts program. In particular, disk WAP2009 has the larger sizes of some of the fonts that come on the SuperFonts disk. My favorite fonts for wordprocessing are Geneva.12, Geneva.14 and Geneva.20. Most AppleWorks print option commands are usable while SuperFont is on your desktop. You can also insert either Hi-Res or Double Hi-RES pictures from many sources, such as Dazzle Draw, into AppleWorks documents. The print quality is adjustable and the printout from my Imagewriter II has never looked better. I can load the font selection for the AppleWorks document I'm currently working on by using the UltraMacros program. The only complaint I have is that I can't change the default font, i.e., the font chosen by the program if I fail to choose any. The SuperFonts program defaults to "Chicago.12"; I would prefer "Geneva.10".

Timeout Filemaster ($49.95 list) is a series of disk and file handling utility programs similar to the GS System Disk. It allows you to copy, lock and unlock, rename and format disks easily. Copies can be of single files or disks; the program supports multiple copies of a disk without re-reading the original. "OPEN-APPLE-RETURN" allows you to switch disk drives. You can also list the disks on your various drives, erase a disk, delete files, change file type, create, rename or copy a subdirectory, swap the position of 2 files in a disk—although I can't imagine why I'd want to, and use the AppleWorks cursor commands (e.g., "OPEN-APPLE-1") to move through a file list. I think FileMaster is a boring program and while it does what it claims, I usually do my file management using the utilities from the ProSEL program or AppleWorks itself.

Timeout Graph ($89.95 list) is an easy program to use. It allows you to make and print various types of graphs from your AppleWorks spreadsheet files. The types of graphs possible, from the same spreadsheet data, include: bar, line, pie, XY, stacked-bar, area and hi-lo. You must first bring the spreadsheet file to the screen. Then you select the data set ranges, the titles, headings and subheadings—then print your graph. It's that easy! I printed my first graph within 15 minutes of completing the tutorial. The program allows scaling (manual or automatic) of either axis and the presence or absence of grid lines. I like it. It's far easier to use than Pinpoint's Graphic Edge program. It's also

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quicker. Because you're working from inside AppleWorks, you can go back to the spreadsheet and change the data—and see the results displayed instantly on the graph. With Graphic Edge you must leave AppleWorks, load Graphic Edge, make your graph and print it. While Graphic Edge does allow the importing of PrintShop graphics onto the graph itself, I find that to be a small advantage gained in exchange for the difficulty of creating a graph. Editing a graph with Graphic Edge is even harder. The only problem I encountered with Timeout Graph was when I tried to print the graph. After several attempts, the print routine hung and caused the program to crash. After several discussions with the folks at Beagle Brothers, we figured out that turning off the print buffer on the Control Panel of the Apple IIgs would solve the problem—and it did. Apparently, this must be done if you have both UltraMacros and Timeout Graph resident in memory at the same time. I don't know why. Editing a completed graph is easy and you can change both labels and headings easily. They are typed in from the keyboard for the most part, primitive perhaps, but much easier than Graphic Edge's trick of taking them from the spreadsheet data itself, since spreadsheet text often does not contain the text you want to use as headings in your graph. Changing the type of graph is also easy and does not require entering additional titles, etc. Of course, each data set will lend itself best to one or two graph types, but given the ease of switching among types, you can find that out easily. The printout size (3 choices) can be changed easily. Also, the graph can be printed separately, or saved as a picture and printed as part of an AppleWorks wordprocessing document, using the SuperFonts program discussed above. Scale numbers on the X or Y axis can be formatted using dollar signs, percent, commas, etc. With line and XY graphs you can specify whether you want lines or symbols. Timeout Graph also allows you to create an XY graph with a linear regression line that can be used to predict data values. What a program!

Timeout Sidespread ($49.95 list) is a relatively simple program that allows you to print your AppleWorks spreadsheets sideways, i.e., the long way on the paper. Thus, if your spreadsheet won't fit on ordinary 8.5 x 11 inch paper, you can print it down the length of the continuous-feed computer paper. It almost eliminates the need for a wide-carriage printer. It is similar to, but somewhat less sophisticated than Funk Software's Sideways program. I have only used the former once and the later twice, so I'm no expert. Still, it's nice to print my spreadsheets sideways from INSIDE AppleWorks, rather than rebooting a separate program. I find this ability especially helpful when printing time-lines on a spreadsheet for project planning. Timeout SideSpread allows you to choose between 16 different fonts for printing and between 3 grades of print quality, from high-quality to draft mode. These are not the same GS fonts that the SuperFonts program uses, however. They are built into the program code - and can't be changed easily. You can also print your AppleWorks data base reports sideways, by using the Timeout Data Converter program that comes on the disk, on the Timeout.Clipboard file.

Timeout DeskTools ($49.95 list) and other desk top accessories, such as those from Pinpoint, have never impressed me. The Timeout DeskTools include: a calculator, calendar, case converter program, clock, dialer, data encrypter, envelope addresser, note pad, page preview, word count program and puzzle. I recommend not loading the Encrypter module. It allows you to change the text of an AppleWorks wordprocessor file so no one else can read it. What a waste! If you forget your key or change the program, the data are lost forever. Beagle will decode the files for a fee, however. The clock and date display program is worthless on the Apple IIgs with its built-in clock. I can't imagine when I would want to convert the case of a word processor file from upper to lower or vice versa. The Dialer is not a telecommunications program. It merely allows you to dial any of 10 preset telephone numbers, redial the last number dialed, or dial a telephone number directly from the keyboard. Why? I think of these programs as gadgets, not business tools. I can see the merit in the Note Pad. You can jot down notes to be viewed and printed later, while working on an AppleWorks document. The Note Pad files can be printed directly, or converted to AppleWorks format, and added to other AppleWorks documents. The Page Preview has some merit, although I can't see much value in it. It allows you to see a shadowy outline of what an entire wordprocessing document will look like, the layout of the pages. The Calendar is useful for keeping track of business appointments, if you spend all of your professional life in front of the computer and carry a disk with you everywhere. Otherwise, I recommend a pocket calendar instead. The program will print out a screen if you wish to take it with you, however. The only one of these Desktools I have any real use for is the Calculator. Here, Beagle Brothers has done a fine job. You can see the data you've entered on a screen-based "printout" and the number of different mathematical functions available is greater than Pinpoint's, including being able to load data to "memory" and the ability to do square roots. You can also configure the numerical display, turn the printer sound off and on, and actually print the screen display.

All in all, these programs are easy to use, and I think represent good value for the price. Discounts of up to 20% are available by mail order for all of them. They represent a welcome addition to the capability and versatility of AppleWorks users. Again, I think that two of these programs, UltraMacros and QuickSpell, should be in the library of every AppleWorks user.

Not content with near perfection, Beagle Brothers has other Timeout accessories in the works. A pop-up thesaurus is being planned for the May AppleFest. Other modules will allow you to increase the number of desktops and clipboards, a disk indexing program to help keep track of AppleWorks files, and the ability to run ProDOS programs from inside AppleWorks. A new module, MacroTools, is already available for $25. This disk includes macro development tools, AppleWorks files, and a macro that allows QuickSpell to check the spelling of words in the database.

They can all be purchased directly from: Beagle Brothers, 6215 Ferris Square, Suite 100, San Diego, California 92121, telephone 1-800-345-1750 or 1-619-452-5502. Beagle Brothers have answered the few questions I've had about the programs quickly, once I could get through to their usually-busy technical support line. They have a new modem number, 1-619-452-5565, which I'm told is active 24 hours per day. I've found that written questions are far cheaper than prime time telephone calls to California—and they receive a reasonably prompt reply.

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MEETING REPORT
by Robert C. Platt

The March 27, 1988, WAP monthly meeting offered something for everyone—regardless of whether your interests ranged from desktop presentations to programming.

Business. The business meeting included a poll of the audience regarding whether the WAP disk library should continue to distribute Mac disks in a 400K format. About 20% of the audience does not have access to 800K drives. On a second question, about 10% of the audience used to keep their WAP Journals in notebooks and wish to have the punched holes reinstated. We reviewed the election procedures, and interested candidates were encouraged to contact the Nominating Committee.

Macintosh—Desktop Presentations. Doug Seward, Manager of Techincal Services for Cricket Software demonstrated *Cricket Presents*. This package is a "desktop presentation" application which is used to generate color slides or printout. As with VideoWorks II, it can also control a "slide show" of graphic displays so that a Mac coupled with a projector can be used to support an oral presentation.

Cricket arranged for a Mac II and color projector which provided WAP with a dramatic demonstration of the power and versatility of this product. When asked when *Presents* will ship, Doug responded that it is awaiting his certification that all bugs have been removed. In an allusion to the Hanes commercials on TV, Doug claimed, "It isn't Cricket, until I say it's Cricket."

Cricket Presents incorporates much of the functionality of Cricket Draw, and can import graphics from that package as well as many others. Because *Presents* generates PostScript, in many cases the final output will be of a higher resolution than the screen displays.

Perhaps the most outstanding feature of *Presents* is its support of color. Mac applications can support up to 256 different colors at any time. *Presents* allows the user to define up to 64 colors of his/her own, leaving the remainder for color shades which are imported in graphics from other programs. Defining colors was easy. *Presents* allows the user to specify values for Red Green and Blue, either as percentages or as absolute numbers (to be copied from references.) In addition, by clicking on a color wheel a particular shade can be picked out of a spectrum.

Presents offers may of the important features which are now standard in graphics programs including: layering (the ability to consider a group of objects as being "on top of" other objects); arrowheads at the end of lines; and creating graphs and charts from numeric data.

Lynn Trusal presented a beta-test copy of *MacDraw II* from Claris Software, which will be selling for $395 (or as a $100 upgrade for present MacDraw owners.) It expands MacDraw by supporting color, layering and views, increased speed and even customized dashed lines. To demonstrate layering, Lynn projected a blueprint of a house. He then superimposed an electrical wiring diagram as a second layer (in red). He then added a layer with furniture layouts, and finally he added a framing diagram on top of the others. The "views" feature allows the user to isolate a portion of a drawing at a particular magnification for later retrieval. For example, if Lynn had wanted to switch between the entire house and a 200% enlargement of the kitchen, he could save the kitchen as a separate view and then use the views menu to switch between the two. Any change made under either view would be reflected on both.

Apple II—Programming. The main program featured a panel of five speakers to explain programming on the Apple II. Peter Combes explained Applesoft Basic. Ray Hobbs described both USCD and ISO Pascal on the Apple II. Jim Winter presented the C programming language. Bob Platt described Modula-2. Then Kim Brennan covered Apple's new shell environment for programming on the Apple IIgs, the Apple Programmers Workshop (APW) and ORCA/M programming shell (which is available for the //e as well as the IIgs.) The panel then fielded questions from the audience.

Editorial contd. from pg 3
of the Jet MUG at JPL, Dave Lingwood of Call-A.P.P.L.E., and I hammered out the first cut of the survey form in Ann Arbor and I have sent it out via AppleLink to several of those participating at the kickoff session. We will keep you posted as it proceeds.

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DEVELOPER'S VIEW... The Great Apple Lawsuit.

by Bill Hole

By now it's old news that Apple has filed suit against Microsoft and Hewlett-Packard over alleged violations of Apple's copyrights in Microsoft Windows and HP's New Wave windowing interface. The immediate result has been an incredible amount of Apple-bashing in the media, with Apple depicted as the Blue Meanie standing in the way of progress and the betterment of mankind.

The three arguments used most often against Apple in regards to this suit are: (1) Apple is hindering innovation in the industry; (2) Apple is standing in the way of legitimate efforts to develop standard, user-friendly interfaces for computers other than the Mac and is therefore hurting the consumer and doing irreparable harm to its own reputation and customer good will; and (3) If anyone should be suing anyone it should be Xerox suing Apple since Apple just stole all its ideas from Xerox in the first place.

The first two of these arguments are more complex so, being a natural procrastinator, I'll put them off until later. The third argument, that Apple's user interface was borrowed or stolen from Xerox PARC research, is a little more straightforward, at least to my eyes.

Did Apple Steal its Ideas from Xerox?

I venture to guess that most of the writers who claim the Mac is a Xerox Alto knock-off have never seen the Xerox Smalltalk user interface in action. The Xerox interface was a tremendous breakthrough in user-friendliness. It pioneered the use of mice and of overlapping windows representing different programs or documents. It also introduced the popup menu and other elements that show up in various user interfaces.

Apple definitely borrowed heavily from the Xerox interface. But a visual comparison of the two interfaces shows that, while Apple is using many of the concepts embodied in the Xerox interface, it implemented those concepts in a unique manner, with a unique look and feel. Apple contributed its own ideas to the general idea of a mouse-driven windowing interface, such as the concept of the pull-down menu bar and the integral scrollbars in certain windows. Apple's use of icons also built on Xerox's basic concepts but in an original way.

Apple did not blindly copy anybody else's user interface or anybody else's look and feel. It took general concepts and built a unique product that looks and feels and works like nothing previously available.

Not so with Microsoft, HP, and Digital Research (of GEM fame). All three of these interfaces look very much like the Mac interface. Rather than invent their own windowing metaphors and general overall appearance, they built interfaces that look very much like a Mac. There are probably as many ways to build a graphics interface as there are programmers in the world, but these interfaces chose to follow the leader rather than to find their own way.

The advantages of going the Mac-alike route are obvious. First, there is less need for research and development. Microsoft and HP know the Mac interface works, so why design their own? They can capitalize on Apple's research and experience. Second, by building interfaces that look like a Mac, MS and HP can benefit from the Mac's cachet of success. It's a familiar interface and therefore doesn't require the users to adapt to something new and unusual. Finally, a common interface makes it easier for developers like Microsoft to write software that is easily portable between the Mac and the PC.

As far as I'm concerned, Apple's copyrights may very well have been violated by Windows and New Wave. These interfaces just look too much like the Mac and add too little to be considered unique or creative leaps forward. But is it a good idea for Apple to bring suit against its imitators?

Is Apple Stifling Innovation?

This brings us back to the first of the three arguments against Apple. Is Apple stifling innovation by insisting that its competitors not copy its user interface look and feel? My understanding of Apple's position is that they are not trying to stop other companies from selling graphical windowing interfaces. It is simply trying to stop them from copying the unique Macintosh way of doing things. This will force MS and HP to find other ways to present their operating systems graphically and will inevitably lead to new and original ways of doing things. This is stifling progress? Hardly. This is encouraging progress and innovation. But is it good for the consumer to be faced with a plethora of different, highly innovative and unique user interfaces, or would he/she be better off with one standard interface?

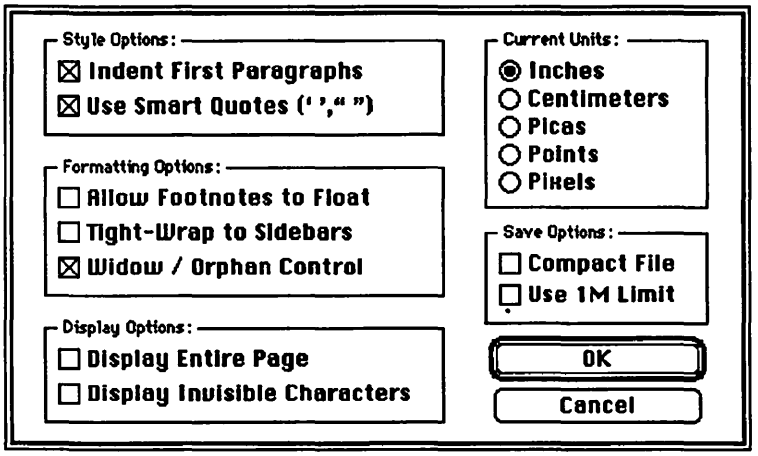
Is Apple Hurting the Consumer?

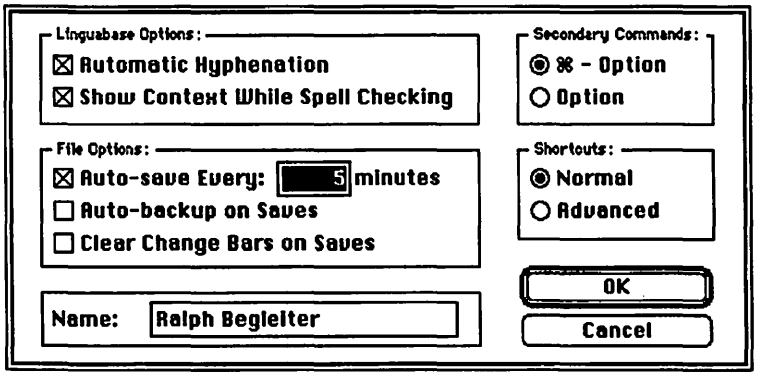
This argument is the one with the most force. Apple is definitely trying to discourage knock-offs of the Mac interface from becoming standard across the industry. This is a natural desire. For the past four years Apple has been selling the Mac based on its uniquely simple, intuitive and easy to learn user interface. Studies have been published showing that Macs are cheaper to operate than MS-DOS machines because of the lower training expenses. What happens when the competition becomes as easy to use as the Mac? Apple is suddenly at a real disadvantage: the Mac is no longer easier to use than other machines, and because it is a non-standard system there's less reason to buy it.

There's a lot to be said for having a single user interface across many different computer systems. Wouldn't it be nice if you went to work and found yourself using the same keystrokes and mouse movements on your AT at work as you do on your Mac at home? By prohibiting this kind of standardization Apple is making life harder for individuals who have to use different machines and on companies that have to pay to train its employees on different operating systems.

Apple is also putting itself at risk by encouraging other companies to develop their own graphic interfaces. What happens if Microsoft and IBM develop a Presentation Manager that looks, feels and works differently than the Mac but is just as easy and intuitive to use? If that interface becomes the standard, the Mac not only loses its advantage of ease of use, but, because it is non-standard, people don't feel like learning its unique operating

contd.



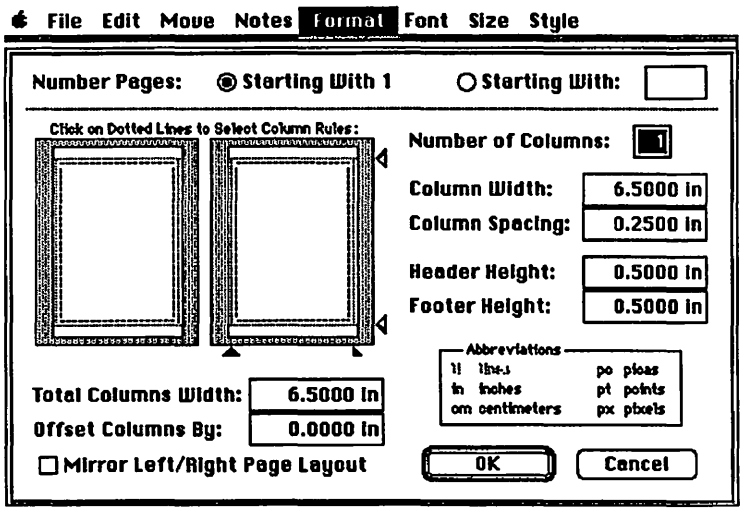


Now here's the bad news. FullWrite isn't all that easy to learn. It requires a lot more getting used to than MacWrite. The user interface is friendly, but the features are so numerous (and in some cases their names are unfamiliar to a novice) that it has taken me the better part of two months to feel comfortable with FullWrite, and I'm still not always sure I know what I'm doing. In short, there are so many features that FullWrite is sometimes confusing.

And there are bugs still in the program (remember, it's a "pre-release" version). System crashes are fairly common and unpredictable. I've been able to reproduce a few crashes, so I can avoid them, but I don't understand why they're happening. FullWrite's publishers are collecting these bug reports in an attempt to fix them before the final release.

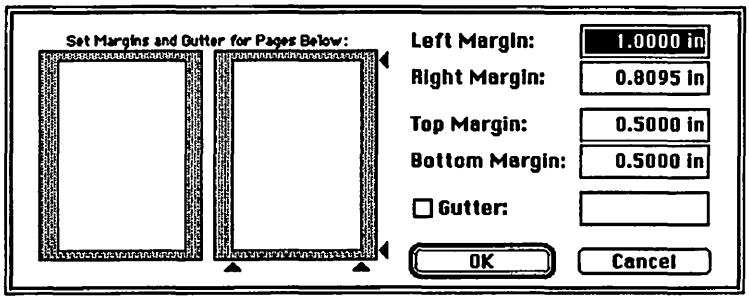
FullWrite requires a lot of memory in your Mac. It keeps a working document in memory, saving it to disk only on command (users can set their program to SAVE automatically at an interval they determine—or they can turn *off* the auto-save option altogether). This demand on memory is among the biggest problems with which the publishers have been struggling.

The program is quite fast in its normal word processing functions, but it slows noticeably when a document has a lot of formatting, graphics and special features such as footnotes. That's because every change to the document must be reflected in all of the features (footnotes must be repositioned, hyphenation must be readjusted, word-wrap around graphics must be rearranged, etc). A recent heavily-formatted, seven-page document became agonizingly slow toward the end. However, closing the document and re-opening it seemed to pick up the pace again, perhaps because the memory was cleared and a fresh version created.

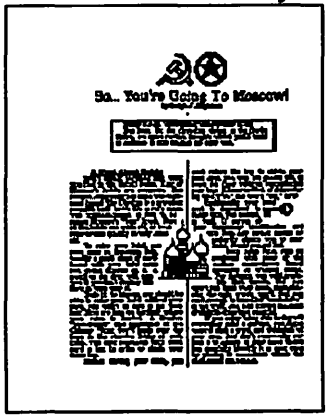


The LAYOUT dialog box, with margin setting and other features, including user-defined setting of page numbers.

Another major problem area is with margins. MacNovices don't really understand (and shouldn't *have* to) the difference between a left/right margin and a header/footer margin. In practical terms, they are the same thing: white space around the edge of a document page. But Macintosh word processors (even MacWrite) treat the two types of margins differently. FullWrite forces the user to remember that left/right margins are set in the "Page Setup" command under the FILE menu, while top/bottom (header/footer) margins are set in a new "Layout" command in the FORMAT menu. The instruction manual appears to recognize this problem because it frequently reminds the user of the fact that page margins are set in the FILE menu while header/footer pargins are set in the FORMAT menu. Furthermore, the *contents* of the headers and footers (such as words or graphics you want to appear *within* the headers and footers) are inserted in still another way, by choosing the "header" or "footer" command from the FORMAT menu. This is an awkward arrangement which becomes intuitive only after considerable use.



And there is a major bug in the margin set-up aspect of FullWrite. Setting the margins simply is *not* WYSIWYG. Users must specify larger left margins than they actually desire, if they want their pages to print properly.



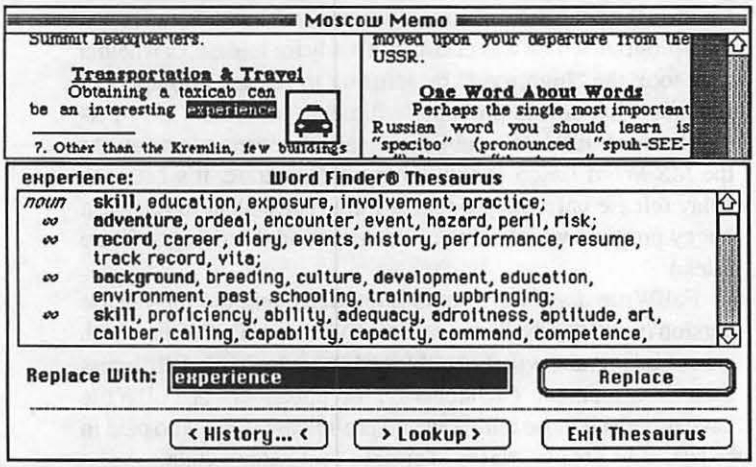
Margin setting is still a problem in FullWrite. Margins must be set wider than actually desired to accomodate an apparent bug in the program.

contd. on pg 58

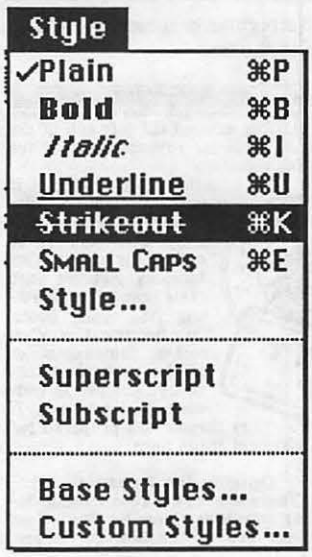
advance that they will receive *two* free upgrades when they are released. This was a sop to people who have waited patiently to receive *something* for their money.)

First, here's a look at a published page created completely within FullWrite. At a glance, you can see many of the features which make it stand out from a MacWrite page.

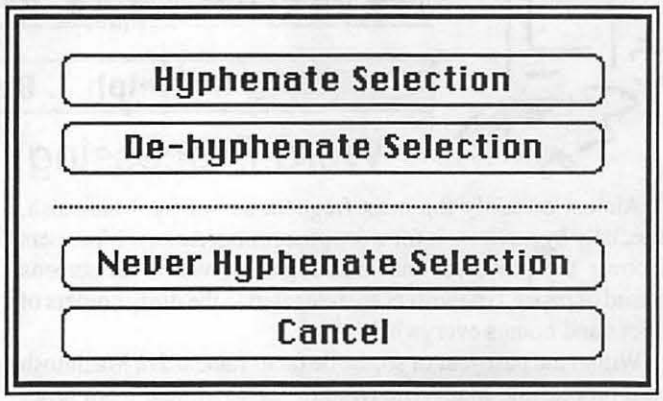
Columns (even multiple column styles on a single page), column-rules, graphics (actually *created* in FullWrite), text-wrap around graphics (even irregularly-shaped ones), footnotes (and several other types of notes) are just a few of the most noticable features.



Others include an easy-to-use spelling checker and thesaurus built right into the program; indicators of changes made in the document and a typestyle called "strikeout" which allows stricken text to remain in a document while highlighted as deleted material (imagine the value of these feature to lawyers who are constantly revising their documents).

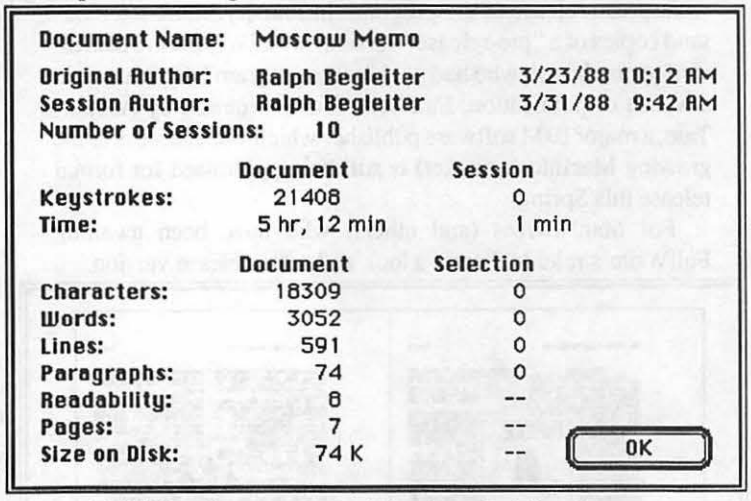


Other features include: automatic creation and numbering of footnotes, chapter endnotes, indexes, bibliographies, tables of contents; a wide variety of tabs (beyond just a decimal tab); page formatting for "mirror-image" left and right pages; formatting for pages to be bound at one edge; kerning of characters; mail-merge capability for mass mailings; custom style sheets allowing users to specify font styles and sizes, ruler set-ups and other formats as a "package" called up by a single mouse click or keyboard command; automatic hyphenation, right while you're typing (this feature can be turned on or off and allows for "exceptions" to the standard hyphenation rules).



FullWrite offers something called "posted notes." These are the electronic equivalent of those sticky notes we attach to documents suggesting revisions or additions. In FullWrite, users can post a note to a specific place in the document, without those words actually *appearing* in the document itself. These notes can even be tagged automatically as to their author, so various reviewers of a document may be identified by the original author. There's even a built-in outliner, far easier to use than MS Word's or MindWrite's.

This word processor provides a "Get Info..." command in the FILE menu which provides information about the amount of time spent creating a document (useful for billing time), in addition to its number of words and other statistics. There's even a "readability index" suggesting whether a document is too complex for average readers.



FullWrite allows you to check the characteristics of your document, including a "readability" index which measures your style against a standard education level reader's ability.

There are many more features. Some are hard to describe, but are almost magical in their implementation. And, of course, not all features will be in used in every document by every user every day.

Perhaps the best single feature of FullWrite for MacNovices is the *fully* WYSIWYG characteristic of FullWrite. That is, what-you-*see* -on-the-screen-truly-*is* -what-you-get-on-your-printer. (There's nothing more frustrating about many other Macintish word processors than the fact that you can't tell what you'll get until you print it out. And there's an exception in FullWrite, noted in a moment.)

contd.

MacNovice Column

by Ralph J. Begleiter

Word Processing: The Next Generation

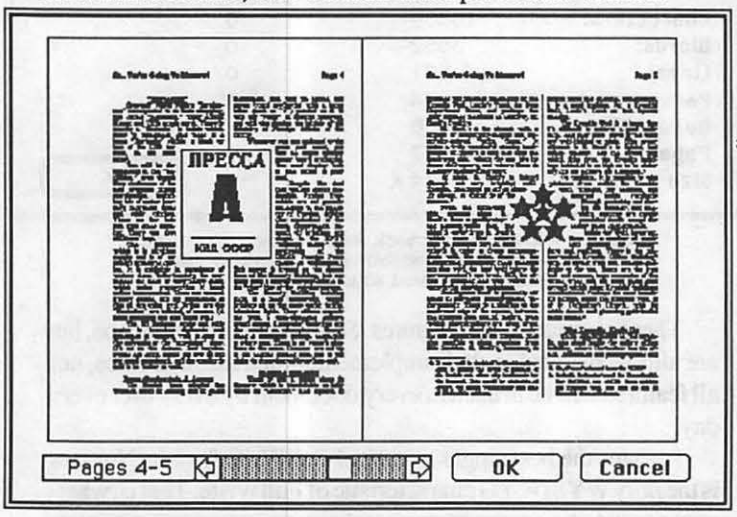
Almost certainly the most frequent use of the Macintosh, especially by novices, is for word processing. As new Mac users discover the power of manipulating their words on screens instead of paper, typewriters are relegated to the dusty corners of offices and homes everywhere.

Within the past year or so, the de facto standard in Macintosh word processing, MacWrite (Apple's original Mac word processing program) has been dethroned by a number of newer entries. While MacWrite was, and still *is*, the simpest word processor to learn and the easiest to use, its limitations have become too marked to ignore.

Microsoft Word, a word processor which was supposed to capture the market and catapult Macintosh word processing into a new generation, failed to do so because of its clumsy, un-Macish relationship with the user, and its unforgivably buggy first release version.

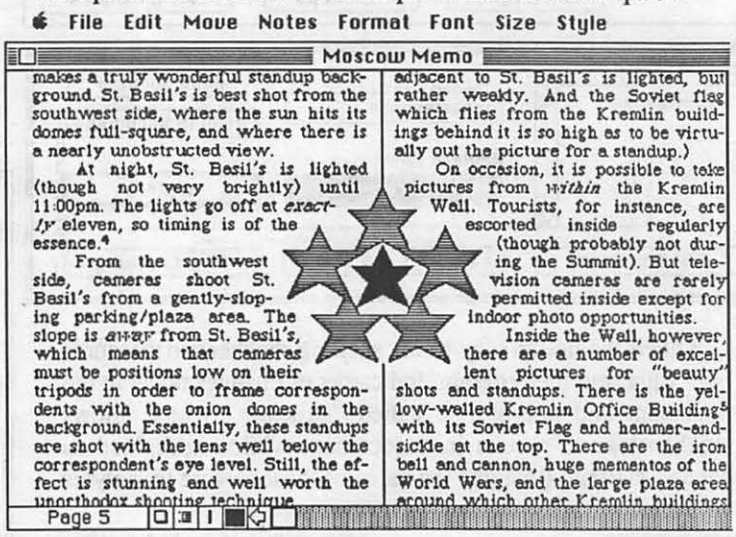
For more than a year, Macintosh users eager for a powerful word processor have been waiting for the release of a program called FullWrite (whose name has since been changed to FullWrite Professional). Ann Arbor Softworks, FullWrite's creator, persisted in promising delivery of the state-of-the-art word processor, but was unable to work out the bugs to achieve widespread release of the program. In January, some ten thousand copies of a "pre-release" version of FullWrite were distributed to purchasers who had paid for the program last summer, in advance of publication. FullWrite (since acquired by Ashton-Tate, a major IBM software publisher which wants access to the growing Macintosh market) is still being promised for formal release this Spring.

For MacNovices (and others) who have been awaiting FullWrite's release, here's a look at the pre-release version.

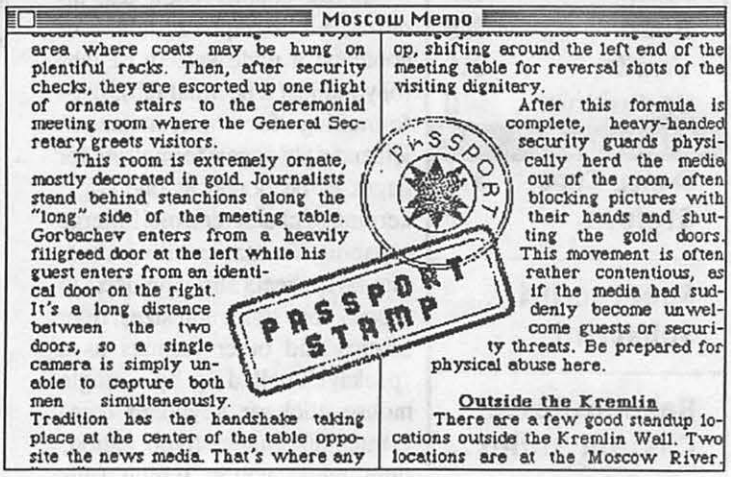


FullWrite is, in fact, the first truly advanced word processor for the Macintosh. It performs tasks far more advanced than MacWrite or virtually any other word processor on the Macintosh market. And it does so with a friendly interface for the user. It's not cluttered with obscure codes and commands (as is Microsoft Word) and it rivals some of the better "desktop publishing" programs in its capabilities. There's a debate over whether the publishers violated "vaporware" ethics by advertising a program which was clearly not ready for release, or whether they took the "high road" by refusing to release an imperfect product. That debate probably will never be settled. (My personal view: FullWrite's publishers made the correct decision. As the MS Word fiasco should amply demonstrate, it's better to delay release until the product is truly *ready* than to release a buggy program which turns off its users and discourages future sales.)

FullWrite *does* have some limitations, and the pre-release version *is* still buggy. There are some aspects of FullWrite which are confusing, and will probably need upgrades to fix. I'll discuss these in a moment. (Incidentally, the publishers of FullWrite have promised those ten-thousand pre-release users who paid in



Note the column rules, the text-wrap around irregular graphics, and the automatic-numbering of footnote references in the text.



contd.

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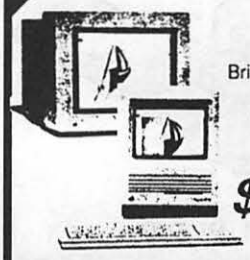

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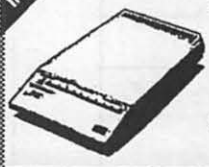

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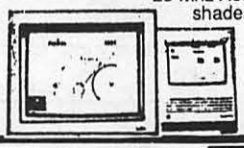

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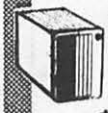

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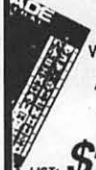

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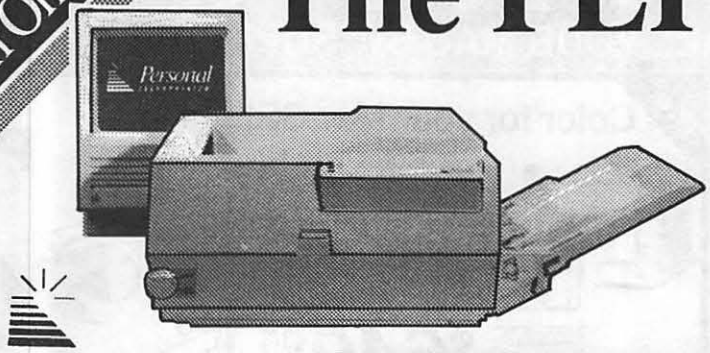

General Computer's PLP outdistances the Apple LaserWriter® II SC in all major areas. Following is a QuickDraw laser printer comparision brought to you by General Computer and MacCorner.

	PLP™/PLP Plus	LaserWriter® II SC
Price	$1999 (PLP Plus: $2129)	$2799 (No Plus Available)
Outline fonts	Yes	No
Scalable & rotatable fonts	Yes	No
True italic & bold fonts	Yes	No
Bitmap fonts for fast printing	Yes	Yes
Font families included	6 (PLP Plus: 13)	4
Printer resolution	300 Dots Per Inch (DPI)	300DPI
On-screen page preview	Yes	No
Draft modes	150 DPI, 75 DPI	None
Kerning & Track Kerning	Yes	No
Number of PicComments supported (Apple-defined extensions to QuickDraw)	16	3
Final cost after Postscript® upgrade	$3999	$4899
Reduction & Enlargement %	Any size from 25% to 400%	50%, 75%, 100% only
Footprint	1.85 sq. ft.	2.57 sq. ft.
Pages per minute	6	8
Networking options	PLP Share™: $499 PostScript upgrade: $2000	PostScript upgrade: $2100
Stack-feed of envelopes & legal size paper handling	Yes	Only with optional trays purchase seperately
Weight	38 lbs.	45 lbs.

Macintosh and LaserWriter are a ™ of Apple Computer Corp.

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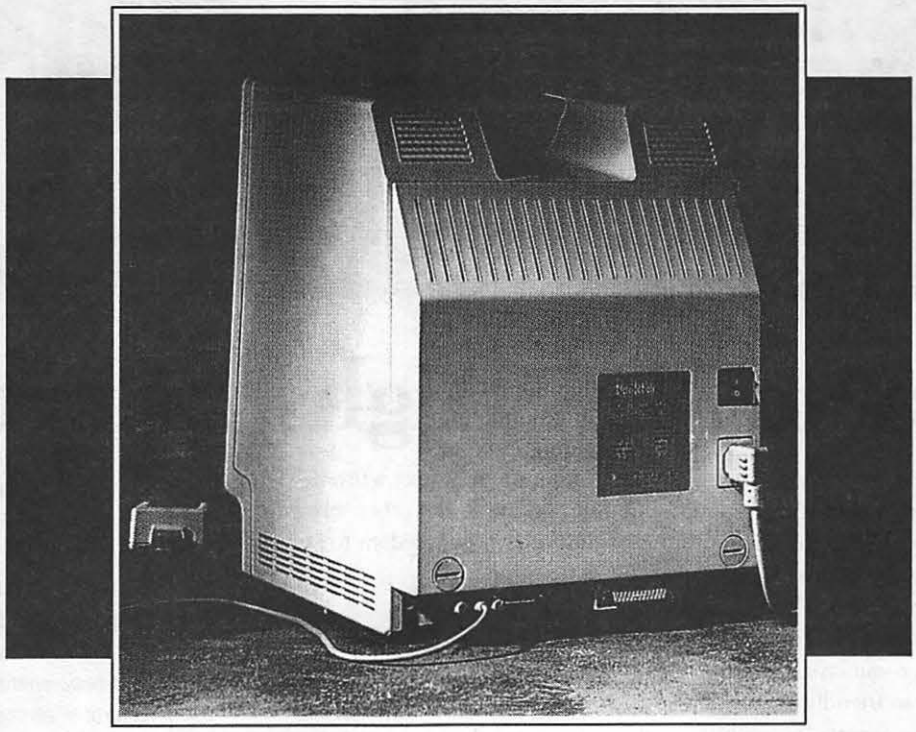

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MicroPhone II is so revolutionary that PC Magazine was moved to say: "MicroPhone II is arguably the best comm software ever written." We won't have it any other way. MicroPhone II. The freedom to be yourself. At the top.

Critics' Choice

Stewart Alsop, P.C. Letter:
"MicroPhone . . . sets the standards that general-purpose communications software will have to follow."

The New York Times:
"MicroPhone is a breakthrough in communications software . . . "

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Supports import and export of scripts as text files. Allows control of PBX's, Hayes and non-Hayes modems through flexible modem drivers. Runs at 50 to 57,600 baud. Emulates DEC VT52, VT100, and TTY type terminals. Mac II and LaserWriter compatible. Works with all Mac large screen monitors. Supports the extended keyboard. Built-in text editor. Includes Glue, licensed from Solutions, Inc.

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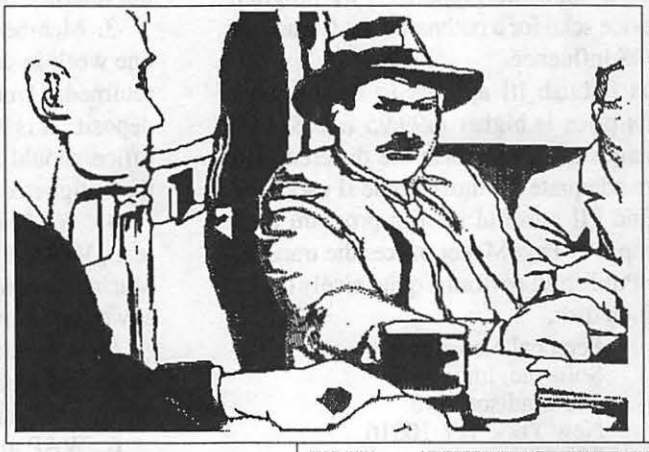
The Design Page for W.A.P.

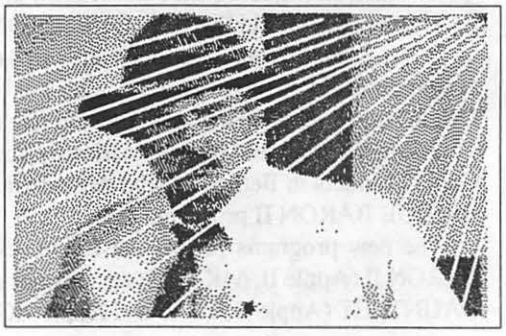
The Design Page for W.A.P.
The Design Page for W.A.P.

★ by JAY ROHR ★



Using various computer tools, this is a drawing from a scanned image of *Slap Maxwell* taken from the VCR in the "still" or "pause" or "freeze frame" mode, and using the original (below) as a template. The original is actually 3-4 times larger than the reduced copies you see here. By working on the larger image, there is much more control over the lines, tones and shades. When reduced, the lines sharpen and look much cleaner.

The letters were done in *Illustrator*, rotated, shaded, and duplicated, and then distorted. The Slap picture on the left is simply a reduced version of the original digitized or scanned image from the VCR. There are literally hundreds of options you can perform once you have a scanned image captured electronically. For instance, there are hundreds of textures and patterned effects you can achieve: from posturization to venetian blind effects, and several kinds of screens that can be used electronically. (Note: *MacVision* disorts or elongates images as shown here, unretouched, but can be adjusted easily; and the drawing, by the way, produced from the template is far from complete.) There are crucial decisions to make in each step along the way, and the artist has to visualize what the final product will look like before the work is completed. It is for this reason that the Mac is a great graphics tool for the artist of the future (and the present). The styles and techniques involved are so unlimited that one can work on this equipment and produce dynamic, original work as a means of personal expression and preference without fear of treading on anyone's toes. In many respects, it is truth that with the Mac, whatever you think up you can probably do with it.✺



graphics so the resulting printouts of even the largest font (48 points) is attractive and well drawn.

PI! also allows multiple page newsletter with automatic page numbering so that one multiple page newsletter can be stored as one file rather than a collection of several one-pagers as in PN.

Boxes also can be round, oval, rectangular, plain or patterned. Text and or graphics will be formatted within or around them. Various thicknesses and combinations of lines can be drawn within boxes to add emphasis and style.

The only weaknesses found in PI! are the difficulty in resizing boxes and the difficulty in specifying pathnames from within the program. The user can reposition and move any box easily, but resizing a box is almost impossible. The best technique to get two equally sized boxes is to draw one and copy it to another location. Disk access is difficult since one must continually return to the file menu to change the default slot and drive numbers before specifying a pathname. Apparently the program does not provide for a device scan for a pathname. Its file access system smells of MS/DOS influence.

Of the two programs Publish It! appears to be the most capable and flexible. Its price is higher ($99.95 list; $74.99 discount), but its advantages are well worth the difference in price. Both programs are adequate for most Apple II users and even the gs users will find PI! a useful interim program until Medley gets out of the vapor or PageMaker makes the transposition to the gs. Actually Publish It! performs quite nicely on the gs once copied to a 3.5 inch disk.

Publish it!	Personal Newsletter
Timeworks, Inc.	Softsync, Inc.
444 Lake Cook Rd.	162 Madison Ave.
Deerfield, IL 60015	New York, NY 10016
$99.95	$59.95
Apple IIe,c,gs 128K	Apple IIe,c,gs 128K

GAMESIG NEWS
by Charles Don Hall

The April 7 GameSIG meeting opened with a visual report on the whereabouts of Ron Wartow. He appears in the April issue of MacWorld (Page 123) and in the town of New Magincia in Ultima V.

Chairman Charles announced that after months of practically no interesting releases, software houses have released all of their long-awaited fantasy role-playing games at once. The past two months have seen releases of WIZARDY IV, ULTIMA V, BARD'S TALE III, and WASTELAND (basically the BARD'S TALE with strong ULTIMA influences, set in the American Southwest after World War III). QUESTRON II is expected out in "about a month", and Origin Systems will release MOEBIUS II sometime "in the near future"—after the ULTIMA V fiasco, Origin is no longer giving out expected release dates.

The meeting featured a presentation by Tom Throop, of Great Game Products in Bethesda, who demonstrated his company's BRIDGE BARON II program.

The new programs passed out for review were: BRIDGE BARON II (Apple II, 64K) and two versions of the arcade game GAUNTLET (Apple II, 128K and Apple IIGS).

PLAN FOR USE OF TUTORIAL TAPES AND DISKS

Washington Apple Pi has purchased tutorial tapes and disks from Personal Training Systems. These will soon be available for members to check out and use according to the following rules:

1. Tutorials may be signed out for home use for a period of 1 week at a cost of $3.00 for WAP members. Not more than two tutorials may be signed out at once by each member.

2. WAP members must leave a deposit of $40 (Excel) or $50 (Word and PageMaker) to sign out the tutorials. Taking two tutorials requires a double deposit. Any check should include the WAP membership # and a telephone number where they can be reached. The deposit will not be forfeited unless the tutorial is not returned on the agreed date.

3. Members must agree in writing to return the tapes within one week in good condition, at which time the deposit will be returned. Unreturned tutorials will result in the loss of the deposit. It is the borrower's responsibility to contact the WAP office, should circumstances prevent the return of the tutorials on the designated date.

4. WAP members must provide the software application (e.g., Word, Excel or PageMaker), cassette tape recorder, and Macintosh computer for use with tutorials. WAP cannot provide any of the above items.

5. Members will be asked to sign an agreement that specifies the tutorials loaned, amount of deposit, the return date, as well as their understanding not to copy the disks or tapes.

6. WAP members may sign out or return the tutorials from the WAP office during regular Pi business hours.

7. WAP will place in the Journal a listing of the available tutorials and the specifics about obtaining them from the WAP office.

The following Macintosh Tutorials are available for WAP members:

Excel
1. Fundamentals of Excel 1 (novice users)
2. Fundamentals of Excel 2 (experienced users)
3. Creating Business Graphs
4. Adding Power to Your Spreadsheet
5. Building and Using Databases
6. Building and Using Macros
7. Linking and Consolidating Spreadsheets
8. Advanced Spreadsheet Techniques
9. Advanced Macro Techniques

Microsoft Word
1. Beginning Word
2. Intermediate Word
3. Advanced Word

PageMaker
1. Beginning PageMaker
2. Intermediate PageMaker
3. Tips and Techniques

If these tutorials prove useful to WAP members, additional ones may be purchased for loan. Additions to the tutorial library will depend on members' returning the tutorials on time and in good condition.

PERSONAL NEWSLETTER AND PUBLISH IT! A Review

by Ray L. Settle, The Annapolis Slice of Washington Apple Pi

We have all been waiting for desktop publishing to come to the Apple II, and now it seems that it has arrived. The two packages I am about to review beat several other promised programs to the dealers' shelves and are compatible with the IIe, IIc, and IIgs. Despite GraphicsWriter and other graphics oriented programs, the IIgs is still waiting for a true desktop publisher that takes advantage of its particular capabilities.

The two packages that are the subject of this review are both worth their costs and will both enable their users to pursue desktop publishing to some limited but adequate degrees.

Personal Newsletter (PN) offers desktop publishing (DP) for the most economical price—$59.95 list; $47.99 discount. With the economy price, however, the user gets DP but gives up a few nice touches that most users of other DP programs take for granted. PN enables one to draw boxes for headlines and columns of any size. In the boxes, one can place text by typing it directly in or by importing ASCII text files from just about any ProDOS source including Appleworks. Graphics can also be imported to any box from either the included samples or from any ProDOS formatted Print Shop, Mini-Pix, or Newsroom file.

The graphics provided are quite disappointing and look like someone copied them from the bathroom wall. To get the graphics from other programs, one must convert them to ProDOS format using the System Utilities, ProDOS User's Disk, or Copy II Plus. Sorry, GS owners! Your system utilities won't do it.

Any ASCII text file imported into a box will be formatted to fit into the box and will flow around any graphics that are included in the box. The system comes with 6 different fonts which can each be any of four different sizes in addition to tall and fat modes. Most standard type styles are also supported, such as, underline, bold, italics, reverse, shadow, and outline, as well as various combinations of the above. Point sizes are not supported but each font can be enlarged in the graphics mode up to four times its normal size. To get any letters larger than normal, the user must treat them as graphics.

PN comes on three double sided disks which includes one disk side of sample newsletters, one of fonts, and two sides of clip art. All can be transferred to one 3.5 inch disk if the clip art is placed in a subdirectory. The program is available on 3.5 inch disks for an additional $9.50 plus the original system disk. (Since the program is not copy-protected and will transfer easily to a 3.5 inch disk, save your money and do it yourself.)

PN uses a command line user interface which functions by entering a one letter code as defined in a text box at the bottom of the page and changes whenever the user enters a new menu area. The entry of commands is fairly simple and even this mouse oriented person had no difficulty with it, but beware, the system is different and looks like something one would expect to find on a PC system. Drawing and resizing boxes is fairly easy and can be done at any time. Text editing is fully supported with both the directly typed and imported text. Just highlight and edit. A change of font for a box will cause the box to be reformatted to accommodate the new size text.

The strength of PN is in how easy it is to draw and resize the text boxes and the ease with which one can access data on any other disk. The user can get a directory of any disk simply by specifying a pathname to a subdirectory. The subdirectory will then be cataloged.

The weaknesses of PN are in its handling of headlines and graphics. The method for increasing the size of fonts is just too awkward and results in headlines that look like old lo-res drawings of letters. The graphics are by far the least professional part of the package. The drawings look amateurish and have no definite style, but rather look like an amalgamation of attempted art from many different sources all with different formats and textures. If one could not use the other graphic packages, he would probably pass up PN.

Overall, PN is a good package for the money and will enable the Apple II user to get into DP.

The other DP program reviewed here is Publish It! (PI!). This package comes with four double sided disks—one system side, one sample side, two font sides, and four clip art sides. The program is available on 3.5 inch disks for $10.00 and the original system disk, but once again the program is not copy-protected and will almost fit on one 3.5 inch disk. A suggested configuration would be to copy the fonts and clip art to a 3.5 disk in two subdirectories and the system onto to a 5.25 inch disk. Such a setup would be ideal for moving around in the files. Of course, that leaves no room for storing files so a separate data disk will be necessary before starting.

PI! uses a mouse (or joystick) interface that is highly reminiscent of the Macintosh. It uses pull down menus, scroll bars, and a drawing tool area on the left. Drawing boxes for text and graphics is easily done but difficult to adjust or resize once done. The program makes a distinction between graphic boxes and text boxes that is not clearly explained in the manual. So remember that even though one has a clearly defined box drawn on the screen, he can not import or type text into it until he puts a text box inside it. Graphics are placed in boxes within text boxes with text flowing around them.

Unlike PN, PI! allows the user to crop graphics to fit the selected box. PI! comes with a comprehensive and attractive graphic collection and will allow the importing of DHR pictures. **NOTE:** Even though the box ad says PI! will import Print Shop graphics, the manual does not. Several attempts to import both DOS and ProDOS version of Print Shop graphics failed.

The best feature of PI! is that it allows the direct importing of AppleWorks files. Such a feature enables the user to collect articles from several different sources and place them into a newsletter without any format conversions. PI! also allows the direct importing of ASCII files from just about any other word processor.

PI! provides the users with six fonts also but allows the sizing of fonts by points rather than by multiples of one original size as in PN. With the variations in font sizes, PI! effectively provides 25 fonts for the users. It also treats headlines as text rather than

contd.

DESKTOP PUBLISHING SIG—April 6

by Cynthia Yockey

A representative from Claris, the software company spun off from Apple last year, demonstrated the newest versions of *MacWrite, MacPaint* and *MacDraw* at the April meeting of the Desktop Publishing Special Interest Group. In addition, dPub SIG Chairman Tom Piwowar announced that Aldus has withdrawn its offer as announced in its newsletter to registered *PageMaker* owners that it would sell its new drawing program *FreeHand* to members of computer users groups for $100 (a promise the company's rep also made at March's meeting). Aldus is now claiming it meant to sell one copy of *FreeHand* per group, not one copy per group member, at that price.

"I'm trying to put together a group buy based on Aldus's embarrassment factor," Piwowar said, "but they seem to have a very high threshold."

Another matter concerning *Freehand* was reported in the April newsletter of the Capital PC Users Group Desktop Publishing SIG: it may be contaminated with the "virus" INIT that erased the contents of the hard drives of many unsuspecting Mac users on March 2. It was perpetrated by *MacMag* in Canada and was supposed to invade the System folder, then display a peace message on March 2 (the Mac II's birthday) and erase itself. It was not supposed to take along the contents of anyone's hard drive, but it is reported to have done so. [Note from author: I received the Aldus *PageMaker 3.0* update on April 12 and will not install it until I am sure it is virus free. Better safe than sorry.] Marty Milrod announced that Don Brown of CE Software has written a "vaccine" that will protect your System folder from other viruses installing themselves without your permission and it is now available through the WAP disketeria. Apple is also said to be working on a vaccine.

MacWrite 5.0

The best news about Claris is that it has announced that it will support all past and present users of *MacWrite, MacPaint, MacDraw* and *MacProject*. Just call Claris Technical Support at 1-415-962-0371 with your problem or question.

As for the update of the Mac's first word processor, Claris's new local rep Bob Fydrich said, "We didn't do too much to *MacWrite*. It was written for a 128K machine and was hard to enhance due to the way the code was written. If you break one piece to rewrite it, you break the whole program. But it's still a nice entry level program."

New features of *MacWrite 5.0* include a spellchecker, a "select all" command, and more command key equivalents. It is available now and costs $125 new or $25 for the upgrade. Current users can call 1-800-544-8554 for an upgrade packet (you'll have to return your original disk). Claris's customer relations number is 1-415-962-8946.

MacPaint 2.0

Unlike *MacWrite, MacPaint* was 95 percent rewritten, Fydrich said. However, its resolution is still the same (i.e., for the Imagewriter, not the LaserWriter) and it does not use color so it can still be compatible with the Mac 512Ke. New features include tear-off palettes, the ability to open up to nine documents at once, auto scrolling, zooming in and out, editing in 50 percent mode, drawing from the center of an object, and a "magic eraser" that lets you erase down to a previous level of your drawing. Like *MacWrite*, it is $125 new and $25 for the upgrade.

MacDraw II

This new version remains QuickDraw-based, but is faster, more flexible and more precise than the current *MacDraw*, according to Fydrich. It is supposed to ship in late May and will retail for $395; the upgrade is $125. If you purchase *MacDraw* now for $195 (less through mail order discounters), you will get a coupon to buy the upgrade for $100.

MacDraw II is positioned as "almost a low-end computer-assisted design (CAD) package" and now has drivers for HP and HI plotters up to E size, Fydrich said. Its new features include layering of drawings limited only by RAM, autosizing of lines to scale, the ability to create your own arrows, rotation, customizable rulers, up to eight colors, the ability to customize patterns, "and more." It cannot do Bezier curves, but can imitate them by using the "smooth" function on polygons.

One advantage of *MacDraw* over a program like *FreeHand*, an informed source pointed out, is that the latter won't handle PICT files such as *Excel* graphs. Thus, *MacDraw* would be just the ticket for enhancing such a graph, while *FreeHand* would force you to outline the graph in order to fancy up its appearance.

In other news

Claris has also released the new version of its project management package, *MacProject II*, but it was not demonstrated for the dPub SIG. In addition, Fydrich announced that Claris's *SmartForms* forms creation package won't be available until the end of this year; the delay will allow time to add more features.

In the Q & A session, a hair-tearing problem was explained and solved: the laser driver in the new System 5.0 is incompatible with Apple's screen fonts in rare cases and causes type to disappear off the right side of the page. According to Ron Moore, until the laser driver is upgraded, this problem can be solved by using only Adobe screen fonts. Persons desiring copies of Adobe's screen fonts can contact Ron at Electric Logic, (202) 223-9115 and must provide their own blank disks.

Tom Piwowar provided a solution for persons drawing lines in ReadySetGo if they have a problem with their hairline rules being different widths: the two straight line tools do not draw the same width lines. Use a single tool to draw your lines and they will all look consistent.

Also announced at the meeting was a new local business dedicated to selling books on desktop publishing. Ross Book Service is located at 3718 Seminary Road, Alexandria, VA 22304, phone (703) 823-1919.

And finally, several die-hards stayed late to create a list of most-wanted features for *PageMaker 4.0* at the request of Aldus, which is about to finalize its list of features it will add to its next version. Some of the most requested features included a spellchecker and more word processing functions. Last month Aldus' rep said the company will resist adding word processing features like a spellchecker unless the demand is very strong—so now is the time to write to Aldus and let them know what you want.

Cynthia Yockey is a freelance writer, desktop publishing consultant, and Macintosh trainer based in Silver Spring, Maryland.

Article Title	Author	Subject	Mo.Yr.Pg.V	Keywords
Musical Apple	Hobbs, Raymond	Music	03 87 44 09	Music; sequencing.
Musical Apple	Hobbs, Raymond	Music	05 87 34 09	Putting together imaginary music synthesis sys.
Musical Apple	Hobbs, Raymond	Music	06 87 20 09	Making a recording on computer.
Musical Apple	Hobbs, Raymond	Music	07 87 34 09	Designing instruments and making recordings.
Musical Apple	Hobbs, Raymond	Music	12 87 28 09	About synthesis (Part 1).
Views and Reviews	Hobbs, Raymond	Programs	01 87 34 09	A graphing package and a data base manager.
View and Reviews	Hobbs, Raymond	Sundry	02 87 44 09	Review of Filemaker Plus, &12 computer mag.
Views and Reviews	Hobbs, Raymond	Software	10 87 38 09	Softswitch and Performer reviewed.
Views and Reviews	Hobbs, Raymond	Software	12 87 44 09	AST-Vision plus and JamBox 4+ are reviewed.
NFL Challenge: A Review	Hoff, Marc S.	Games	03 87 32 09	NFL; games; football.
Space Quest: A Review	Hoff, Marc S.	Games	08 87 36 09	Space Quest game review.
Developer's View	Hole, Bill	Software	12 87 82 09	Programmers Online Companion reviewed.
The RomSwitcher: A Rev.	Hurd, David A.	Lisa	03 87 48 09	Provides for Lisa owner to have both Lisa & Mac.
PHM Pegasus: A Review	Hutchinson, Reid	Games	05 87 31 09	PHM Pegasus game review.
U.S.A.A.F: A Review	Hutchinson, Reid	Games	01 87 38 09	Strategic game—bombing over Germany, WWII.
Annapolis Slice News	Johnson, Claire	AAS	01 87 13 09	News of Annapolis Slice group meeting.
Annapolis Slice News	Johnson, Claire	AAS	02 87 17 09	Annapolis Slice of WAP meeting of Dec 13.
Annapolis Slice News	Johnson, Claire	AAS	03 87 17 09	Report on the last meeting.
Simulating Own Airstrip	Johnston, Thomas	Games	02 87 18 09	Describes new features of Flight Simulator II.
Abandnd. Airstrip at Duvall	Johnston, Thomas	Games	02 87 19 09	Flight Simulator II.
GameSIG News	Johnston, Thomas	Games	09 87 46 09	Report on upcoming event.
Outlining Complete Runway	Johnston, Thomas	Games	04 87 27 09	Drawing a runway for Flight Simulator II.
You Be the Judge	Kaye, Harvey	Computer law	05 87 44 09	Copyright infringement of computer programs.
Journal Index	Kaye, Harvey	Journal	03 87 42 09	About the Index for the Journal.
Trademarks	Kaye, Harvey	Trademarks	07 87 46 09	Trademarks used to identify software products.
"TAWUG Greatest Hits"	Kelbaugh, Paul	AppleWorks	07 87 24 09	Public domain templates for AppleWorks.
Upgrading Apple //e to IIgs	Kelbaugh, Paul C.	Apple IIgs	07 87 26 09	Apple //e to Apple IIgs upgrade.
EdSIG News	Kirby, Patricia & Weissman, Jessica	Education	03 87 29 09	EdSIG meeting report.
EdSIG News	Kirby, Patricia	Education	07 87 13 09	Report on the May meeting.
EdSIG News	Kirby, Patricia	Education	11 87 33 09	General meeting on Education program planned.
On-line Offerings	Kirby, Patricia	Education	12 87 36 09	On line learning.
Computer Learning Month	Kirby, Patricia	Meetings	12 87 37 09	Main meeting report on the education program.
AppleWorks Tax Template	Koskos, Paul	AppleWorks	02 87 16 09	A template for use in preparing the 1986 tax forms.
Magic Slate: A Review	Kreisberg, David	Word Process.	02 87 17 09	3 versions to provide for both children and adults.
Advanced Excel Graphics	Lanford, Audri G.	Excel	02 87 58 09	Plot continuous independent var. using Excel.
Developer's View	Lanford, Jim	Mac programs	01 87 78 09	Graphic programs; more cheap hard disks.
Developer's View	Lanford, Jim	MacWorld	02 87 50 09	About MacWorld Expo.
Developer's View	Lanford, Jim	Mac	04 87 58 09	About the new Macs.
Developer's View	Lanford, Jim	Meetings	05 87 72 09	Spring Devloprs Conf.; MMU; reading for MacII.
Developer's View	Lanford, Jim	Software	07 87 54 09	SCSI disks; Mac II video mem. & color monitors; 68020 vs 80386; used Mac prices.
Developer's View	Lanford, Jim	Sundry	08 87 74 09	Sundry.
Developer's View	Lanford, Jim	Sundry	09 87 75 09	Sundry.
Developer's View	Lanford, Jim	Mac sundry	11 87 60 09	24 bit color; HyperCard, big screens.
Plus Works+AW—II+	Levine, Boris	Apple II+	07 87 22 09	Using Plus-Works to use AppleWorks-Apple II+.
Plus Works+AW—II+: Pt 2	Levine, Boris	Apple II+	10 87 27 09	Using AppleWorks on the Apple II+.
Hardball for the Mac	Lindstrom, Peter	Games	03 87 35 09	Games; Hardball.
Mac Pro Football: A Rev.	Lindstrom, Peter	Games	08 87 37 09	Mac Pro Football game review.
Disketeria Dispatch	Little, Jim	AII PD disks	07 87 81 09	WAP Disks: ProDOS 812; ProDOS 813-816 (TAWUG 1-4); ProDOS 817; CP/M 420.
Diskteria Dispatch	Little, Jim	AII PD disks	06 87 82 09	WAP disks: Apple /// 1006; Apple II 503; 504; 229; GS 2001 & 2002.
Long Word Wiser	Love, John A., III	HyperCard	12 87 64 09	A script for HyperCard.
Oh No—He's back!!	Love, John A., III	Software	07 87 67 09	Microsoft's BASIC Interpreter, V3.
Realm of Impossibility	Lucas, Tom	Games	04 87 26 09	Realm of Impossibility game reviewed.
PCPI Z80&WordStar Pro	Lustig, Henry	CP/M	05 87 20 09	CP/M on the Apple.
Deep Space	Malka, Jeff	Games	05 87 28 09	Deep Space—Operation Copernicus review.
War In the South Pacific	Mangus, Ben	Games	04 87 23 09	War In The South Pacific game reviewed.
Warship: A Review	Mangus, Ben	Games	01 87 36 09	Tactical naval game—Pacific 1941-45.

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PI-SIG News	Golden, Robert	Prgrm Interface	10 87 18 09	Report on Sep&Aug Program Interface SIG mtgs.
PI-SIG News	Golden, Robert	Prgrm Interface	11 87 30 09	October Program Interface SIG meeting report.
PI-SIG News	Golden, Robert	Prgrm Interface	12 87 25 09	Report on the Program Interface SIG meeting.
Tech Tidbits	Goodin, Sue et al	Sundry	12 87 18 09	Sundry.
Clan Practical Accountant	Granite, David	Accounting	02 87 16 09	Review of an accounting program.
Realms of Darkness: A Rev.	Granite, David	Games	06 87 37 09	Realms of Darkness game reviewed.
Balance of Power (Apple II)	Greco, Philip	Games	11 87 35 09	Balance of Power reviewed (Apple II).
Questbuster Cartog. Sys.	Greco, Philip	Games	10 87 44 09	QuestBusters reviewed.
Ultima Hook	Gregg, John	Games	09 87 44 09	Report on Ultima I.
Bop 'N' Wrestle: A Rev.	Hakim, Davy	Games	03 87 34 09	Games; BOP 'N' WRESTLE.
Gemstone Healer: A Rev.	Hakim, Davy	Games	05 87 29 09	Gemstone Healer game review.
Robot Rascals: A Review	Hakim, Davy	Games	01 87 37 09	Review of Robot Rascals.
Bard's Tale II	Hakim, Ray	Games	07 87 41 09	Bard's Tale II—The Destiny Knight game review.
Bureaucracy: A Review	Hall, Charles Don	Games	06 87 36 09	Bureaucracy game reviewed.
Hollywood Hijinx& Moonmist	Hall, Charles Don	Games	05 87 30 09	Hollywood Hijinx review; Moonmust game review.
Lurking Horror&Stationfall	Hall, Charles Don	Games	10 87 42 09	Lurking Horror and Stationfall reviewed.
Phantasie III: A Review	Hall, Charles Don	Games	06 87 34 09	Phantasie III: The Wrath of Nikademus review.
Wrath of Denethenor	Hall, Charles Don	Games	04 87 24 09	Wrath of Denethenor game reviewed.
Battlecruiser: A Review	Hancock, Chris	Games	06 87 35 09	Battlecruiser game review.
Battlefront: A Review	Hancock, Chris	Games	03 87 35 09	Games—Battlefront review.
Battles In Normandy	Hancock, Chris	Games	11 87 36 09	Battles In Normandy reviewed.
Run5 Magazine: A Review	Hancock, Chris	Games	04 87 26 09	Run5 Magazine about games.
Spy Adventures In Europe	Hancock, Chris	Games	11 87 36 09	Spy's Adventures reviewed.
Mac Q&A	Hardis, Jonathan E.	Mac sundry	01 87 48 09	Answers to questions WAP members have asked.
Mac Q & A	Hardis, Jonathan E.	Mac sundry	03 87 50 09	
Mac Q & A	Hardis, Jonathan E.	Mac sundry	04 87 60 09	Mac Sundry.
Mac Q & A	Hardis, Jonathan E.	Mac sundry	06 87 59 09	Sundry
Mac Q & A	Hardis, Jonathan E.	Sundry	08 87 48 09	Sundry.
Telecom SIG News	Harvey Dave	Telecommun.	09 87 42 09	Report on the Telecom SIG July meeting.
Telecom SIG News	Harvey, Dave	Telecommun.	03 87 14 09	Report on the Jan 87 meeting.
Computers In Education	Hasson, Joseph A.	Education	08 87 30 09	Computers in the schools.
Historical Chronology of the Evolution of Computer	Hasson, Joseph A.	History	12 87 42 09	Chronology of Computers.
Intellectual Property Rights	Hasson, Joseph A.	Law	05 87 45 09	Foreign trade bill and intellectual property rights.
Patentability of Software	Hasson, Joseph A.	Software	06 87 54 09	Software patentability.
Software Industry: Part 1	Hasson, Joseph A.	Software	09 87 48 09	Report on the software industry.
Software Industry: Part 2	Hasson, Joseph A.	Software	11 87 39 09	Economic review of the software industry.
US in World Competition	Hasson, Joseph A.	Books	02 87 42 09	Review of book about US in world markets.
Introduction to dBASE II	Hayman, Gary	Data bases	02 87 22 09	How to use a CP/M data base.
I Love Apple Music: Pt 1	Hayman, Gary	Music	06 87 22 09	Simple music with an Apple.
I Love Apple Music: Pt 2	Hayman, Gary	Music	07 87 38 09	Program listings for making music with Apple II.
I Love Apple Music: Pt 3	Hayman, Gary	Music	08 87 26 09	Part 3 of series of articles about music on the Apple.
I Love Apple Music: Pt 4	Hayman, Gary	Music	09 87 26 09	Writing from sheet music into the computer.
I Love Apple Music: Pt 5	Hayman, Gary	Music	10 87 20 09	About music including a program.
I Love Apple Music: Pt 6	Hayman, Gary	Music	11 87 18 09	Music including programs.
WPL MultiPrint	Hayman, Gary	Word Process.	03 87 22 09	Apple Writer; word processor; program.
Letter to the Editor	Hayne, William J.	Mac	01 87 79 09	Author's experiences with Mac peripherals & sftwr.
Button-Down Guide-Apple	Hobbs, Raymond	Apple //	01 87 24 09	Information on the Apple // and Applesoft.
Button-Down Guide-Apple	Hobbs, Ray	Apple //gs	03 87 28 09	IIGS.
Button-Down Guide-Apple	Hobbs, Ray	Softswitch	05 87 24 09	Softswitch
Button-Down Guide-Apple	Hobbs, Raymond	Assembly lang.	07 87 14 09	Assembly language.
Button-Down Guide-Apple	Hobbs, Raymond	Languages	09 87 24 09	Only assembly language program listed.
Music SIG News	Hobbs, Raymond	Music	01 87 20 09	News of November meeting.
Music SIG News	Hobbs, Raymond	Music	02 87 37 09	Report on the Dec meeting.
Music SIG News	Hobbs, Raymond	Music	09 87 25 09	Report on May meeting.
Music SIG News	Hobbs, Raymond	Music	10 87 18 09	Report on June meeting.
Music SIG News	Hobbs, Raymond	Music	12 87 31 09	About the October meeting of Music SIG.
Musical Apple	Hobbs, Raymond	Music	01 87 18 09	Apple IIGS and music synthesis.

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Faster Printing With IWII	Boren, John J.	Printers	05 87 56 09	Printer speed of ImageWriter II.
Ohio Kache Systems Board	Brennan, Kim	Boards	01 87 31 09	Describes a kache system used with a hard disk.
PaintWorks Plus	Brennan, Kim	Graphics	07 87 41 09	PaintWorks Plus is reviewed.
Hi-Res to Print Shop	Brown, Charlie	Print Shop	01 87 32 09	Converting any 52x88 section exactly as it appears on the Hi-Res screen into a Printshop graphic.
Rev. Corner: MacWorld+	Burger, James M.	MacWorld	05 87 69 09	MacWorld, new products announced.
Rev. Corner: MacWorld+	Burger, James M.	MacWorld	03 87 71 09	MacWorld.
Automated Excel Timesheet	Butler, David & Lanford, Audri	Excel	01 87 64 09	Using Excel to provide an automated timesheet.
Library Lookup In Excel	Byrd, Richard J.	Excel	04 87 72 09	Excel use for real estate settlements and a library.
IW Print-Fading Problem	Byrd, Richard J.	Printers	05 87 56 09	Imagewriter II problem solved.
Letter to the Editor	Carpenter, Chuck	RAM	08 87 46 09	Compatibility of the AE RamFactor board & AII+.
Simple Script For Hypercard	Chapman, Rick	Hypercard	12 87 60 09	A script for Hypercard.
Technical Writing On Mac	Chapman, Rick	Mac	08 87 58 09	Macintosh used to type a Ph.D. dissertation.
Volunteer Profiles	Combes, Peter	Volunteers	12 87 46 09	Weikert, David and Schwartz, Dana, profiles.
Elegant Desk Accessories	Condit, David E.	Software	08 87 81 09	SmartScrap & The Clipper reviewed.
Best of Apple Items—TCS	Coukouma, Euclid	AII sundry	10 87 34 09	Sundry.
Best of Apple Items—TCS	Coukouma, Euclid	AII sundry	02 87 34 09	Sundry
FedSig Corner	Crawford, Steve	FedSIG	10 87 54 09	Report on FedSig August meeting.
Cumber's Corner	Cumber, J. F., Jr.	Sundry	06 87 40 09	Sundry about software support for the Mac.
AppleWorks SIG News	De Vito, Ken & Matzen, Peg	AppleWorks	04 87 11 09	AppleWorks; SIG News; report on Feb. 87 meeting.
GraphicWorks: A Review	DeMay Jr., Tom	Graphics	04 87 44 09	GraphicWorks program reviewed.
AppleWorks SIG News	DeVito, Ken	AppleWorks	02 87 14 09	An AppleWorks patch for booting up nonstop; numbering pages and upgrading to version 2.0.
Documax: A Review	Doherty, Dave	Software	11 87 23 09	Text-file utility which searches, cutting and pasting.
Dealer's Corner	Ferris, Dave(Levco)	Mac	07 87 55 09	Buying Mac II vs upgrading Mac +.
Mac Assembly: Book Rev.	Field, Bruce F.	Books	04 87 80 09	Assembly Language Primer for the Macintosh & Programming the Macintosh in Assemb. Language.
Q & A	Field, Bruce F. & Platt, R. C.	Sundry	01 87 16 09	Sundry
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Q & A	Field, Bruce F. & Platt, R. C.	Sundry	03 87 10 09	Sundry.
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Q & A	Field, Bruce F. & Platt, R. C.	Sundry	12 87 14 09	Sundry.
Ramup: A Review	Gatewood, Tom	RAM	03 87 20 09	RAM, RamDisk, Ramup.
I Am Moving To Texas	Goldberg, Jo Ann	Mapmaking	02 87 62 09	Continuation of review of MapMaker 2.0.
Mapmaker: A Review	Goldberg, Jo Ann	Mapmaking	01 87 76 09	MapMaker, a program offering extensive map files.
PI-SIG News	Golden, Bob	Prgrm Interface	01 87 17 09	News of Program Interface SIG meeting of Dec 1.
PI-SIG News	Golden, Robert	Prgrm Interface	02 87 27 09	Meeting of Program Inferface SIG on Jan 5.
PI-SIG News	Golden, Robert	Prgrm Interface	04 87 16 09	News of Program Interface SIG meeting.
PI-SIG News	Golden, Robert	Prgrm Interface	06 87 19 09	Program Interface SIG meeting report.
PI-SIG News	Golden, Robert	Prgrm Interface	09 87 49 09	Report of Program Interface SIG recent meeting.

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by Harvey Kaye

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Ready, Set, wait a minute...	Angelides, Alicia	dPub software	06 87 50 09	dPub software review of Ready, Set, Go! v3.0.
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MacNovice Column	Begleiter, Ralph J.	Sundry Mac	02 87 47 09	About an easy first project with Excel.
MacNovice Column	Begleiter, Ralph J.	Sundry Mac	03 87 53 09	Hard disk drive.
MacNovice Column	Begleiter, Ralph J.	Sundry Mac	04 87 50 09	Family tree.
MacNovice Column	Begleiter, Ralph J.	Sundry Mac	05 87 60 09	Fragmentation causes delays in saving or reading.
MacNovice Column	Begleiter, Ralph J.	Sundry Mac	06 87 64 09	Help for the novice with a Mac.
MacNovice Column	Begleiter, Ralph J.	Sundry Mac	07 87 48 09	Finding a lost file on a Mac.
MacNovice Column	Begleiter, Ralph J.	Sundry Mac	08 87 52 09	Help on the Mac for beginners.
MacNovice Column	Begleiter, Ralph J.	Sundry Mac	09 87 58 09	Information for novice Mac users on Word.
MacNovice Column	Begleiter, Ralph J.	Sundry Mac	10 87 48 09	About trashing.
MacNovice Column	Begleiter, Ralph J.	Sundry Mac	11 87 58 09	Sundry Mac.
MacNovice Column	Begleiter, Ralph J.	Sundry Mac	12 87 54 09	Using the filing system to store and find documents.
Mac "Vaporware" Advisory	Begleiter, Ralph J.	Mac programs	01 87 51 09	The final report about Multiwrite.
MacNovice Column	Begleiter, Ralph J.	Programs	04 87 50 09	Use of More and MacDraw to create a family tree.
CP/M&ProDos Disketeria	Bell, John	All PD disks	04 87 89 09	DP/M WAP disk reviewed.
CP/M&ProDos Disketeria	Bell, John T.	CP/M	07 87 19 09	WAP CP/M disk 224.
C And the Apple II	Bell, John T.	Languages	12 87 26 09	Using the C programming language on theApple II
Word Perfect 1.1	Berman, Howard M.	Word Proces.	08 87 25 09	Review of Word Perfect v1.1.
Mac-101 Keyboard	Bethel, Charles	Mac keyboard	09 87 71 09	About Mac keyboard Mac 10
Solutions-Gemini 10 Prob.	Bishop, Ken	Printers	01 87 13 09	Gemini 10 printer solution to use with AppleWorks.
New World Spell Checker	Bishop, Ken	Spelling	04 87 30 09	Spelling Checker, Webster's New World reviewed.
Arcticfox: A Review	Black, Forrest	Games	01 87 38 09	A tank war game.
Ring Quest: A Review	Black, Forrest	Games	05 87 31 09	Ring Quest game review.
Disk /// Backup	Bloom, Allan M.	Apple ///	11 87 28 09	Apple /// Disk in WAP Disk library.
Apple // Hi-Res Graphics...	Bloom, Allan M.	Graphics	09 87 31 09	LHGR140 program is reviewed.

contd.

in standard musical notation, using the product's built-in editor; 2) Assign instrumentation to the musical parts; and 3) Play the music, using the computer's built-in synthesizer.

Added features. As if the ability to compose and perform music on a home computer weren't enough, there are a number of additional features that are available in some of these products. Some allow piano keyboard-style note entry, using a facsimile piano keyboard displayed on the screen, in conjunction with the computer's mouse-based "point and click" operation. Some allow computer keyboard "quick-entry" of musical events. Some permit the written music to be sent to an external synthesizer, using the popular MIDI standard. Some allow editing and playing to be done simultaneously (like a "jam session"). Finally, some products contain an instrument editor, which permits construction of customized instrument sounds. This last feature deserves some further description.

An instrument's unique sound—its tone "color", or timbre—is generally thought of as the confluence of two factors: 1) The instrument waveform; and 2) the instrument envelope. It is convenient to think of the waveform as representative of the way an instrument is constructed—its size and shape, and the material from which it is made. The envelope represents the way in which the instrument is played—blowing, plucking, striking, etc., plus the way the tone builds up and decays. Of the two, envelope definition has the greater impact on the timbre of the instrument (for a detailed explanation of waveforms and envelopes, see earlier Musical Apple columns in back issues of this Journal). Therefore, to completely define an instrument, it is necessary to define both waveform and envelope. This definition can be as complex as we like—sometimes dozens of waveforms and envelopes may be defined to produce a single instrument—or it can be relatively simple. None of the products listed above allows definition of more than one waveform and one envelope for a single instrument.

Getting started. Any of these products makes getting started in computer music both easy and inexpensive. I find them all fun to use. I think, however, that the computer music beginner should take a few moments to consider the range of features that he or she wishes to use before making a purchase. If a feature isn't going to be used, then it has little or no value. Moreover, some of these packages are easier to use than others (although this is a purely subjective evaluation). If, however, a printed score is the most important end product for you, the editing and printing power of the product should be the most important criterion for making a purchase decision. On the other hand, if defining instruments is of primary importance, you should look to a package that offers great power in that arena. I have tried to condense my (subjective) findings in the chart below, using a scale of 1 to 10 for each generic feature. The score represents what I consider "value", a combination of ease-of-use and power. I did not give each product an overall score, because the range of features offered is quite large, and overall ratings would require some sort of weighting process, which I had no desire to get into. Note also that I included Deluxe Music Construction Set for the IIgs, although currently only its smaller brother, Music Construction Set, is available. Electronic Arts has been promising DMCS for the gs for some time, and I have a lot of faith that eventually vapor condenses into something tangible...

	Concert-ware +/	Music-works	Deluxe Music Const. Set	Music Studio	Instant Music
Computer	Mac	Mac	Mac/IIgs	IIgs	IIgs
Enter Music, Mouse	7	7	8	7	4
Enter Music, Keyboard	3	0	5	0	8
Edit Music Data	7	7	9	6	4
Edit while Playing	0	0	0	0	8
Play Music	5	5	5	5	5
Dynamics, Tempo, etc.	6	4	8	7	8
Define Instrument Wave	5	0	0	0	0
Define Instrument Env.	5	5	0	5	0
Change Instrument Assignment	7	4	3	3	3
Print Music	6	6	8	6	0
Print Text with Music	2	0	7	7	0
MIDI Implementation	6	0	7	0	0

Summation. For the computer music novice, several inexpensive and useful program packages can be used to enter and play music. To the best of my knowledge none of these products costs as much as $100. If a printed score is desired, it's hard to beat Deluxe Music, but if "jammin'" is your thing, Instant Music is the only choice. Concertware+ is probably the best package for making new instruments. Parenthetically, I found the Concertware manual to be the best tutorial plus reference, and the Instant Music manual has the most additional music theory information. However, I encountered no serious deficiencies in the other manuals.

I would recommend browsing the offerings before you buy. These packages have lots of bells and whistles not covered in this article, and some of them might appeal to you. Also, these products are updated from time to time, and I may have missed some features (although I'll try to review any updates as I receive them). Have fun writing computer music...

WORLD BUILDER CONTEST DEADLINE EXTENDED!!! WIN VALUABLE PRIZES!!!

Due to the small number of entries received, the deadline for the World Builder contest has been re-extended to July 1. Simply use the Macintosh World Builder program to create an adventure game, and send a copy into the WAP office, Attn. World Builder Contest. Entries will be judged by Ron Wartow, the author of the immensely popular World Builder module DEEP ANGST, and winners will be announced at the WAP main meeting in August. This is positively the *last* time that the deadline will be extended.

ASCII file. Anyone interested should call me at home.

I'm also interested in putting together a disk with all the PD invokable modules available, including explanations, etc. Any takers welcome.

ANNAPOLIS APPLE SLICE NEWS by Katherine M. Cave

President Craig Contard called the March meeting to order at 10:10 with about 30 people in attendance. He announced that Program Chair Lou Aymard was recuperating from a back operation and couldn't even use his computer (horrors!) and all AAS wished him a speedy recovery.

Cards were passed out for opinions on summer meetings and if there is a desire to go to the AppleFest in Boston in May. If enough people are interested, group arrangements can be made. Cards came back with a unanimous desire for summer meetings, and a few names were listed and will be contacted for the May 20-22 AppleFest.

CRABBS is now in operation. The number is (301) 974-0221.

The program was on "Taxes—how the computer helps you save and file." Louis Tanney showed the Apple IIgs people how the program TaxView works. while Dave Fox presented MacIn-Tax on the Mac SE in another room. Both rooms had VCR cameras trained on the computer and the picture was watched on a large TV. Both presentations were well attended and executed and all expressed their satisfaction. Several indicated desire to buy the program. The meeting was adjourned about 11:45. The AppleSIG then went to their meeting.

The May 14 meeting will have a program on lap computers. All meetings are held on the second Saturday of the month from 10 am to 12 noon at the Anne Arundel County Community College, Rooms 313 and 315. Summer meetings will be announced soon.

The Music SIG is a special interest group devoted to computer music. The group maintains an ongoing program of entertaining and educational meetings and events for music enthusiasts, normally presented in the early afternoon on the second Saturday of each month. It is not necessary to be a musician nor a computer guru to enjoy the musical fun and games—for information, call Bill Bittle at 236-9898.

Our April meeting was held at Dolly Madison Library in McLean, Virginia, and largely consisted of preparations for the April 23 Washington Apple Pi Music Extravaganza. This is our Big Fling each year, and it promises ample wattage, if not great music. However, we are happy to welcome Bill and Barbara Southworth of Southworth Music Systems, who have graciously consented to prepare a demo of digital sampling to hard disk at the Main Meeting.

Among the new products unveiled at the San Francisco MacWorld Expo last January was a low-end MIDI interface from Apple Computer. The product is nothing special from a technical standpoint, but the fact that Apple Computer felt that it was worth introducing is noteworthy. With that product, Apple Computer has acknowledged music as a viable Apple-supported application area.

This is hardly surprising news to professional musicians. It's hard to find a pop musician who hasn't at least dabbled in computer-controlled music, and many classic musicians have tested the MIDI waters as well. Washington Apple Pi presented its first all-music program in 1985, and there has been a music program offering in every year thereafter. Computers and music have been irrevocably joined, and the results can be heard every day on radio, television, in the theatre, in clubs, and on records and tapes as well.

As a music hotline volunteer, the most frequently-asked question I hear is, "How do I get started?". Fortunately, no matter which computer is being used, there's always a way to get started. What is more difficult to find is a way to get finished.

BASIC SETUP. At a minimum, a computer-assisted music system must have a way to get music data in, a way to transform that data into sound, and a way to get the sound out. If the computer is an Apple IIgs or a Macintosh, the computer itself contains a synthesizer which may be accessed. There are quite a few low-cost music packages which can be used to generate and play music through the built-in synthesizers on these computers, and it is these packages that I wish to write about today. If you are using an Apple][+, //c or //e, there is a built-in speaker which can be programmed to produce the sound. Users who wish to explore this possibility are referred to Gary Hayman's excellent "I Love Apple Music" series, published over the last year in this Journal. For the IIgs and Mac users, here is a list of the products that I will be covering in this article:

Macintosh	Apple IIgs
Deluxe Music Construction Set	Deluxe Music Construction Set
Musicworks	Music Studio
Concertware +	Instant Music

Some of the above products also have the capability of controlling an external instrument—a synthesizer. To the best of my knowledge, none can simultaneously control an external synthesizer and the built-in synthesizer. All of these products work in roughly the same way. Some are easier for me to use than others, and some offer more features than others, but in general the mode of operation is this: 1) Write the music on the computer,

contd.

ON THE TRAIL OF THE APPLE ///

by Dave Ottalini, /// SIG Co-Chairman

PUBLIC DOMAIN DOINGS

Our /// SIG PD offerings have grown so fast in the last year or so its time for a breather of sorts. This past month we've taken a look back at some of our older disks and begun the process of updating them a bit. Specifically, we're now looking to replace older versions of Menu.Maker with the newest version, 3.00, which makes it's debut this month. Among the new features is a running clock at the main menu level!

While the review process is going on, we've gone ahead with plans to combine Basic Utilities disks 1002 and 1003 into one disk, which now becomes 1002A/B. It should be available as you read this (see accompanying article on this new disk). As a result, we are also introducing a new PD disk 1003, called Footnote // /. It's a Pascal program that will allow you to merge text and footnotes into one file. Thanks to /// SIG member John Chapman Jr. for providing this program. It's on a double-sided disk. Side one is self-booting and has our Menu.Maker program and the user manual. Side two is also self-booting (in this case Pascal) and will run the actual program. Look for an article next month describing how to use Footnote ///.

We're also introducing PD disk 1026A/B, which is another in the Daryl Anderson Tools Times Three series. This program is called Disk Window /// and will allow you to look at and edit the internal code of just about any program on disk you might like (this can be very dangerous...so use carefully!). As with other D.A.Datasystem disks, this one has complete documentation (on side one). Side two contains the actual program, and will return you to Menu.Maker when you are finished (this program is listable and you can make it a stand-alone program very easily).

Finally, due to popular request, I plan to put together a disk with back Trail columns on it. Watch "Down The Trail" for future availability.

NEW HELPER

New /// SIG member John Ruffatto has volunteered to help with copying duties for our PD library and is currently cataloging and researching all our disks. That way, we can provide /// SIG members with hard copy listings at the office, and on disk (it will become number 1000) that includes information on each PD disk. It will be constantly updated as we add new disks. This should also help ensure that all /// SIG PD disks are of uniform quality, are copied correctly and will work as advertised. We also hope to send some version of the hard copy listing to new members.

My thanks also to /// SIG member Jim Salerno who helped upgrade our Menu.Maker program. He's also been working to prepare more PD disks for our library (you'll see some of his work next month).

AND MORE ON THE PD FRONT

I'm also happy to announce this month that we will be releasing four new fantastic PD programs in the coming months. Three come from Foxware in Salt Lake City. This company offered three excellent commercial programs during the early days of our ///, but stopped support in 1986, after Apple decided to discontinue production. Your /// SIG Co-Chairman called up Foxware's Bill Wunderluck recently, and for a small consideration fee, was able to get all three programs, with source code and user manuals on disk, placed into the public domain!

The three programs are: Inkwell, a What-You-See-Is- What-You-Get (WYSISYG) word processing program (written in Business Basic); TerminAll, a telecommunications program that can emulate a number of computer terminals, and Basic Extensions, a set of Business Basic Invokables that will allow the user greater flexibility when working with our Business Basic. The amount of material that we've received for these three programs is awesome and will require some time to go through, so keep an eye here for availability!

A fourth program, Infonet, is a Bulletin Board program originally sold by Sun Systems. President Bob Cook placed the program into the public domain during the Phase /// Conference last year. But it's been considerably upgraded since then and we'll be placing a copy of that into the library as well. Our thanks to Bill Roady, a ///er on CompuServe for making the upgraded program available to us.

MOVING ALONG

Lt. Dale Sykora continues to work on a number of projects. Recently on CompuServe, he said he has figured out how to configure Joystick Port A to be used as a serial port! This could have immediate impact, since all it would take is a specific driver and proper cable to hook up a second serial device (printer or modem), without wasting a precious slot! A new set of utilities for use with On Three's Desktop Manager are in the works and are already getting rave reviews from its beta testers. Created by Earl Brelje, Disk #3, includes a Block editor, a ruler that allows the user to measure the X and Y position of a character on screen, an Accessory Manager designed to make loading and managing DTM modules very easy, and a new, more powerful Print Screen utility. The disk should be available about the time you read this.

By the way, any of you with GS's should really check into the DTM GS version. It really is excellent and will, like our /// version, work from within ANY program running on the GS. Other "Background Utility" programs like Pinpoint or TimeOut are restricted to working only from within AppleWorks, a major disadvantage. Recent reviews of DTM missed the mark a bit, complaining that it was not as good as the others because it had been ported over from our /// version. But because SOS and ProDOS 16 are in many ways alike, the fact that it was ported over may actually be one of its major strengths.

FINALLY

I need a volunteer willing to type a Taylor Pohlman article onto disk. In going over all the old Softalk articles, I discovered Pohlman forgot to send us one of them. He's a busy man and despite requests, has yet to get back to it. So rather than wait, I'd like to go ahead and have it typed into the computer as a Text/

contd.

process code means the chip is from a run that does not support the CAS before RAS. The error does not show up on Apple's GS diagnostics (version 2.0). It does show up using /RAM5 as data that "changes" or the RAM disk won't reboot. Check your chips before this one GETS you. (Information from Dennis Doms of Open-Apple)

Fan-tastic

FROM DAN HUGHES

I know this must sound like a dumb question, but how do you surgically remove the Apple IIGS fan from the power supply? I just got a Keningston System Saver GS (very chic looking) and try as I might, I cannot disconnect the crummy Apple fan that seems glued on to the power supply. There are only two moving parts, but when I press them it doesn't loosen the grip of the casing on the power supply. Anybody been through this one?

FROM PAUL KELBAUGH

Dan: Same story on the fan. I installed the fan, then bought a ConServer (MDIdeas). Took over an hour and two Tylenol to remove fan. The plastic tabs (as you by now are WELL aware) hook like fish hooks (guess there is an analogy there, but I won't pursue it) into the power supply metal wall. I just kept wiggling, pressing and pulling until it came off. I did remove the power supply from the IIGS first (10 seconds to do) so I wouldn't destroy anything. So, I can testify that it is do-able, but can't recall any special tricks. It came out in one piece, ie., I didn't have to snap the plastic tabs or anything.

FROM KIM BRENNAN

Welcome to the sledgehammer club, Dan. I originally had the Apple fan only loosely mounted, but one day (for whatever reasons—I must have been insane) I 'snapped' it on tight. Beyond a small amount of sheet metal bending I've managed to remove the offending piece of electrical junk without any damage, but OH, what a bother!

Cash In On These!

FROM DAVID WOOD

Here are a few ideas I'd like to see implemented on whatever version of the GS we're using six months from now:

1: RUBBER COVERS FOR THE KEYBOARD. The rubber overlay would not only be functional (it'd keep dust out), but if you put out seven or eight, each with a possible GS keyboard language layout, people would thank you. You'd also be able to sell a bunch. Mac users could use these as well, since they've probably got driver options that can do the same thing. (And the keyboards are getting STANDARDIZED.)

2. APPLE DESKTOP BUS JOYSTICKS. Okay, I know what you're thinking. "Are you on drugs or something?" To that, I answer, "Have you seen a version of MULE or GAUNTLET for the Apple? Or ANY four player game? The ADB should let on up to 15 or 16 devices, and including the keyboard and mouse, that would make for a game with around 13 players, more than most people would want to handle. Sure the conventional joystick manufacturers would moan a little about it, but some programmer could write a driver.

3. SELECTABLE STARTUP SLOT ORDER. You may be one of the many GS users who uses both your 5 1/4" and 3 1/2" drives, so you use the "SCAN" control panel setting. When you start up your system, intent on using the Slot 5 drive, you have to wait several seconds for the GS to check slot 6. On the other hand, if it checked slot 5 first, it'd take it no more than half a second for the system to find out that nobody's home there and move on to slot 6.

4. MORE ROOM FOR 3-1/2" DRIVES. The current GS daisychain can hold two 3-1/2" drives. For us people who work on APW and compile programs that eat disk space like potato chips, it might be nice to have a third 3-1/2" on line to do all the writing and compiling and linking on. Or maybe four. I'd be happy with 4; at that point, I'd have almost 1/3 of a hard disk.

Any more suggestions? I'd like to hear them. I'd especially also like to learn typing on the DVORAK keyboard.

FROM TOM VIER

You can hook four Smartport (in addition to your 5-1/4s on that port) and still have them recognized by ProDOS. Subtract one for the ROMdrive and RAMdisk each. True ProDOS sixteen should support as many as you can power. Somebody will probably then come out with a bus extender box. I would like to see an option in the the GS update for setting speed slot by slot for old hardware compatibility!

FROM KIM BRENNAN

I'll agree with you about a ADB joystick—but something like it is already available, the ADB trackball. Check Mac magazines for that type of stuff. Something else in terms of MULE that would be usable is a two button MOUSE. The Toolbox supports the two button mouse without any changes, so this would reduce the number of additional hardware items for MULE to just one Joystick (with at least one button). Two people could still use the keyboard, but how about support for TWO Keyboards!?

Thundering, Thundering, Louder Than Before

FROM KEN DE VITO

I'm thinking of getting the Thunderscan scanner for the Apple //e and need someone to give me a quick evaluation of it. I've read the recent A+ article and am having difficulty in determining what kind of files on disk are created and what can be done with them. I want to put them into AppleWorks using Beagle Brother's UltraFonts and use them within PrintShop/PrintMaster/Newsroom at the very least. I'd also like to have the capability to send them to different computers and have those computers be able to read them after downloading them from a BBS host. Any and all information regarding this quest will be appreciated.

FROM WALT MOSSBERG

I just checked my Thunderscan manual and discovered the following:

1. Thunderscan images can be saved as either standard hi-res or standard double hi-res images (also super hires for the gs). The manual says these resulting standard files can be edited or viewed using any regular //e graphics programs that use these filetypes—i.e. MousePaint for hires, Dazzle Draw for DHR (these two are specifically mentioned as examples).

2. Any program which permits the inserting of standard HR or DHR pictures into AppleWorks will work with these Thunderscan files. The manual specifically mentions Pinpoint's Graph-

contd. on pg 26

and better text. SoftView has warned that the printer driver, supplied by Apple, is only a BETA version but they have encountered no problems so far. A free upgrade is promised when Apple gives them the final version. SoftView has also said that a program to do state taxes is in the works—as scheduling and production permit. CA and NY are already out. I highly recommend TaxView (even with its couple of bugs)—they have done quite a job for version 1.0. It may not lessen the pinch of paying taxes (as I owe additional!) but it sure does make preparing them a lot more fun AND easier. You won't even need a calculator!

P.S. The program does require 768K (not the 512K on the box sticker) according to SoftView. Also you need either two 3.5" drives, OR one 3.5" drive with a minimum of 1.25 megs! With that configuration you need to create a 512K RAM disk, leaving 768K available for the program! If you plan to use all of the forms, you will need a blank disk for just your data, otherwise you delete the schedules/forms/instructions that you will not need and easily store your info on the second drive. The program is NOT copy protected and hard disk instructions are given—the same manual comes with all three versions of the program.

FROM DAVID PAGE

I agree 100% on TaxView for the GS. I got mine at EggHead for $79 plus tax, and it is a great program. I also can't get the printer to work in draft mode so printing is slow. Also the doc's say you can select the forms to print and then print them out on the Imagewriter, but, you must do this one at a time. There isn't support for the LaserWriter for the GS. There is a bug in the Apple driver. I like the worksheet approach to filling out the forms, it makes things a lot easier. All information on any form is automatically linked to the proper form or forms that require the information (except for 2 forms). All in all, TaxView GS supports about 50 forms and is a GREAT buy.

FROM WALT MOSSBERG

Boy, do I agree. TaxView GS is terrific. It made it easy for me to cut through even the complex new tax system. I knocked off my taxes quickly and accurately within a few days of buying TaxView GS for $79 from Egghead. The only drawbacks are the slow printing and slow scrolling, and the difficulty it has finding all the forms from a hard disk directory. The last problem is solved in V1.02—a free upgrade. But I still used the program with V1.01 by just booting it from hard disk but keeping the forms in a floppy drive. It was fine. As for the slow scrolling—that is a perennial GS problem in graphics-interface programs, not just TaxView. And I took care of slow printing by just firing up the printer overnight, while I slept. It was done when I woke up—and it looked great!

FROM JAMES FRISON

The following is adapted from a true story: Early February, 1988. Having gathered a great pile of information, husband sits down to do the taxes. Although Mr. Reagan said he would never raise taxes (and would he lie to us?), the husband and wife's withholding were prudently raised last year just to make sure that no money would be owed come April; but a cloud of doom hangs over the room nevertheless. The instructions are read; the head is scratched; the numbers are crunched. Hours later, the blackness deepens—$200 is owed. In disgust, husband tosses everything into a filing cabinet. Maybe in April, he can face it again. Maybe he made some mistakes. Saturday, March 26. Husband enters with package.

Wife: What did you buy?

Husband: Oh, some software. It's for doing our taxes.

Wife (Knowing his proclivity for spending money on his computer): We need software to do our taxes?

Husband (somewhat sheepishly): Well, it's supposed to be really good.

Wife: Hmmmph.

Saturday night, 11pm. Husband sits down at computer and begins to enter data. Saturday night, midnight. Husband emerges triumphantly from the "computer room". "We're getting money back!", he wants to shout but the wife is sleeping. Sunday morning. Husband and wife head for brunch at the American Cafe to celebrate—we're getting a refund!

Jerry Pournelle of Byte Magazine has said for several years that MacInTax alone is sufficient justification for buying a Macintosh. Others have also given this software high praise. MacInTax is now available for the GS under the name TaxView and I can add my highest recommendation to those others. If your taxes are at all complicated, get TaxView. ($79 at Egghead)

FROM DAN HUGHES

Is it deductible? What does it do, help you cheat, er figure, better? I owed money on the Appleworks template. Can I count on a refund if I use TaxView GS?

FROM JAMES FRISON

Is it deductible? Yes, as a miscellaneous expense BUT only if your total miscellaneous expenses exceed 2% of your adjusted gross income (GOTCHA!). Well, wouldn't it be nice if you could keep trying different methods and programs until you found one that provided you with a refund. There was nothing magic about the program but it did two things that made a difference for me. It does all the math and links all the schedules (e.g. Schedule B results automatically appear in the appropriate places on the 1040) and it helps you keep organized (e.g. for any entry, you can open a window where the constituent items can be listed. For instance, you can list all the credit card interest then the program totals them, enters that amount on Schedule B, and takes 65% of it). I had 1) several math errors, one of which I'm sure I would have missed no matter how many times I checked the forms over and 2) royally screwed up the capital gains and losses (having never done them before). IRS instructions are online; just highlight the box and OA-?. As with many computer assisted tasks, it is not that you can't do it without the computer; the computer helped me be more organized without having to worry about the arithmetic. I'm almost in a sick sort of way looking forward to doing next year's taxes with the program.

Stale Chips!

FROM DALE SMITH

The following message about several batches of bad (i.e., missing CAS before RAS) chips from NEC was captured from a board I access: Apparently, three sets of NEC 41256 chips do not support CAS before RAS refresh as required by the IIGS. The suspect chips can be identified by a process code (a letter and four digits) next to the date code. A "K", "E", or "P" starting the

contd.

numbers match the ones above. The police assume that drug-addicts committed the break-ins to sell the computers to support their drug consumption. The school experienced a number of break-ins during the year and had to reduce the use of the computer facility. Please circulate this message as widely as possible and warn people of the stolen property. Where there is no market there is no theft.

Shopping Spree?

FROM JOHN MASSEY

The following local Hamfest might be a good place to pick up "just what you're looking for": Memorial Day Hamfest, Sunday May 29, Howard County Fairgrounds, Rt #144, West Friendship, MD. Gates open at 8 AM until 3 PM, premises must be cleared by 5PM. Donation: $3.00 Maryland FM Association, Inc. (301) 987-6042 for info and reservations.

The "Perfect" Solution

FROM ROBERT LAMACCHIA

Does anyone know how to set up the printer in WordPerfect IIGS V2.0 for an Imagewriter II so that it will print in draft or standard mode rather than the NLQ mode that WordPerfect supplies? I tried eliminating the inital string of commands to the Imagewriter in setting up a new printer definition, but that did not seem to work. What I am after is a way to print drafts of documents without eating up the ribbon and the time it takes for NLQ mode.

FROM JAMES EDWARDS

Draft printing is font 2 in WordPerfect IIGS, and standard printing is font 4. You can set either of these to be the default font by selecting the font you want and then selecting DEFAULTS from the print menu. Just be sure that all other settings are where you want them (e.g., right justification, colors for bold and cursor, etc.) because they will become the defaults, too. I have set font2 as the default and the Imagewriter is amazingly fast as well as ribbon-saving.

MultiScribe vs. SuperFonts

FROM ED DOMBEK

I'd like to give my impressions of the ugraded MultiScribe (//e version). Understanding that I updated from version 1.00, my first comment is: WOW!! This is what I expected when I first bought MS two years ago. I paid the extra $10 for the non-copy protected version. It is nice to be able to use it on a 3.5"—without problems. I'm really starting to appreciate the interface structure, too, even though I don't use a rodent. StyleWare has added a NLQ option (I think with v2.0) for printing. It even works correctly (and beautifully) with my Okidata. (NOTE: The Okidata settings for a model 82, 92 or 192 also work fine with a 182. It is what I use.) They have also added headers and footers. What has really surprised me is the ease of use and the SPEED of the spelling checker as compared with Pinpoint. I use an accelerator and I can still notice a difference. The only complaint here is the small (50K) dictionary. I also ordered the accessories at a "special" price (I hope). They include a full scientific calculator, a clock and calendar, a dippy puzzle, and a (get this you GS users) control panel. The control panel gives you macros, beep pitch control, cursor blink speed agjustment, and lets you specify the inverse screen as the default when you boot. I like this for three reasons: with the accelerator I like to slow the cursor blink and raise the pitch of the beep, I prefer the inverse screen, and of course macros. I haven't seen or played with the GS version, but I finally feel like I'm getting my money's worth out of MultiScribe. I'm really impressed with this product. For an everyday, easy to use word processor I think it would be hard to beat. P.S. Has anyone used or seen Picture Manager? I'm interested in any comments.

FROM JON THOMASON

The NLQ was available for v2.0. I've used the Picture Manager, and I'm not particularly impressed. What it does is take a portion of the screen, and convert it into a font. The proper characters, plus a ruler or two, are left in the clipboard, for you to paste. This still leaves a goofy file on your fonts disk. I've almost given up on MultiScribe, now that I've had SuperFonts for a while. Now THERE's an AppleWorks enhancement! I used to use MultiScribe for its print quality, and not so much for the interface. Selecting fonts (before 3.0) was a real bear, even with the numbering in 2.0! SuperFonts handles pictures, in my opinion, much better, and it even allows //e owners the IIGS fonts! What more could you ask for? The only disadvantage that bothers me in SuperFonts is the difficulty of getting foreign characters. In regular AppleWorks, with the GS set to display French, an 'E' with an accent aigu can be obtained with a '{'. To get the same character from a GS font using SuperFonts, I have to use '<x2> N<x1>'. It's really annoying trying to type in "fran<x2> M<x1>ais!" Then again, it's not too much trouble to adjust. That's where UltraMacroWorks comes in! I do an OA-{, and it automatically puts in my <x2>N<x1> for me. It's not bad, considering I had to edit all my fonts to get them in MultiScribe.

Tax Help: Maybe Next Year...

FROM CORY MCNUTT

Just received my TaxView program the other day from Computer Express—$87 with shipping and handling. The GS version (it comes in Mac, GS, & IBM) is suppose dto be exactly like the one that they developed for the Mac. After looking at it, I would have to agree. The program is VERY large—two 3.5" disks filled to the full 800K! One is the program disk (finder included) and the second is the forms/schedules disk. It takes FOREVER to load—about 5 minutes from bootup until it is ready to go! But it is well worth the wait. The screens are EXACT replicas of the IRS forms, and by double clicking on a line or a dollar area you will get complete instructions for that line or an itemization list, respectively. As you fill in the itemized amounts on ANY worksheet or schedule the dollar figures are automatically recalculated (the pointer arrow turns white) AND you can continue to work while the program is recalculating! The program also has a Summary Status window that you can open so that the gross income, taxable income, federal tax withheld, and tax over/under payment is visible at all times. The forms that it produces are IRS acceptable. I never knew the ImageWriter II could print so nice—or SLOW! People, we are talking the ENTIRE EVENING to print out ALL forms AND supporting schedules (including the little itemization worksheets which are for your own use)—17 pages in my case.

I have not been able to print out a draft copy yet, as the printer seems to act up when you attempt anything but condensed print

contd.

in a hardware independent way, so that it works with any HD. InfoDesk has a modified Mode 3 (File usage by blocks) that no longer has a 12 Meg volume size limit provided it can find 3 free 64K banks of memory; if not it reverts to the old routines. There is also an update to the Revision Docs as of 3/12/88.

FROM HARRY BACAS
Dale, thanks again for those timely updates to ProSel. Thanks to you and to Walt Mossberg. What a service! That alone is worth the $6 annual TCS fee.

FROM JOHN MCDOWELL
Thanks also. Since this update was designed to park heads as it blanked the screen, I have to ask—how do you get the screen to blank? I started with version 3.3 but was never able to get blanking. It would be especially nice now that it will park heads automatically. I am using an enhanced //e with extended 80-col card and a 10mb Sider. ProSel is in /hard1 with the utilities in /hard1/util. Maybe there's a program that I never transferred from floppy? Thanks for bringing this software to the Pi BBS.

FROM DALE SMITH
When you run INSTALL.REVSN, one of the questions it asks is, "How long a delay before blanking" (or equivalent words). You're given the choice of any time in minutes from 2 to 59. I've always specified 15 min. It's worked like a charm since the blanking first appeared. I am using it on a GS—I'm not aware of any limitation to its working on other systems.

FROM JOHN MCDOWELL
I got that and set mine to five—but no blank. Do I need a clock?

FROM DALE SMITH
Yes, it won't work without a clock.

FROM PAUL SCHLOSSER
I've just used the the ProSel editor (v2.1). And Bredon does it again! The new editor is fantastic! He's added a new feature, 'automatic' adding of application files to your ProSel menu. It's very easy to use, and he's retained the 'manual' way of adding applications. Adding the applications to the menu was always the hardest part, I thought. I think I understand prefix's and pathnames pretty well, but I never thought the ProSel method was intuitive. I always seemed to have to check the manual, or check how another file was set up in order to add a new one.

FROM DALE SMITH
Just wanted to call the attention of ProSel owners to the latest updates to some of the utilities that I uploaded this morning to Area 2, Apple Utilities. This crop includes version 2.9 of all three BEACH.COMBER programs, v6.0 of CAT.DOCTOR, and v3.4 of MR.FIXIT. There is also a March 22 update to the list of recent revisions. As usual the files are encrypted since they are copyrighted. (Ed. note. And distributed this way with permission from Glen Bredon.)

FROM DALE SMITH
This morning I uploaded new versions of BEACH.COMBER {all three} and CAT.DOCTOR along with the 3/28/88 ProSel updates list. The v6.1 of CAT.DOCTOR enhances the user interface more by adding default responses at the Y/N prompts. And v3.0 of the BEACH.COMBER's improves the handling of bad blocks by the programs.

PI Members Still Unzipped?

FROM DALE SMITH
Here's a message I captured from the AZApple Tree BBS concerning the ZIP chip:

I just got this letter in the mail today that may be of interest.
WE ARE SHIPPING ZIP CHIPS !!
Dear Zip Chip Friend,

These are the words we've all been waiting for. We want to thank you so much for your patience with us and explain when you can expect your ZIP Chip. As design specialists, we were just not prepared for the delay we got from some of the large chip manufacturers. A billion dollar company took our order and then began to shuffle us around as they took care of their "priorities" but that's in the past. WE HAVE NOW RECEIVED ZIP CHIPS FROM THEM AND...THEY WORK GREAT! We've set up a second source of supply and that back-up source will be delivering by March 7. The production run from the first source will be in by March 15. It takes a week to assemble and ship. Now, where is your own personal chip? We have already prepared your package, with your name on it, and it is ready for UPS to ship. Your package contains:

- Your FREE $40.00 value utility diskette.
- Your ZIP Chip instruction manual.
- A static resistant protective ZIP Chip cover.

We will insert your ZIP Chip into its protective cover and ship your completed package the same day it comes in. We will be fulfilling orders by the date they were purchased and we can promise that you will have yours promptly.
Sincerely yours, Vicki Jewell, Manager, Customer Service

FROM DAVE HARVEY
Well, according to the latest reports, some people now have received the chips that they ordered and from initial reports, it does all of what they said it would do. Haven't heard of any WAP members getting one yet, however.

Take a Bite Out of Crime

FROM HOLGER SOMMER
Kenmoor Elementary in Landover Maryland was robbed of 5 computer systems during two break-ins on March 3 and 7. The systems consist of Apple IIe's, Samsung Color monitors, Apple Disk drives and two Josten Speech Synthesizers. Here are the serial numbers of the equipment:

Apple IIe :	D520JLX	Color Monitor:	S019231
	D5201B5		S019238
	E61905D		B036380
	E61904E		B036379
	E6190F4		B036362
Apple Drive:	KA24658	Speech Synthesizer:	AA2142
	KAK2602		AA2103
	KAK2573		
	K1G4316		

If you by any chance get an offer to purchase "cheap" computer equipment check the serial numbers and inform the police if the

contd.

BEST OF THE APPLE ITEMS FROM THE TCS

by Lou Pastura

AppleWorks Word Count

FROM DAVID KREISBERG

I have a large number of students who are writing stories for a contest. They must limit themselves to a certain number of words depending on which category they enter. Is there a way to have AppleWorks count the words for them? We do have Sensible Speller and Sensible Grammar (which I haven't used much). Do these programs have the feature I want? I'd rather stay in AppleWorks if I can. Thanks, in advance, for your help.

FROM RAY COOPER

There is a routine in TimeOut from Beagle Brothers which counts words.

FROM JON THOMASON

The word counter is in the DeskTools package.

Hard Drive Puzzle Solved!

FROM LAWRENCE HAIDER

I recently purchased a 40 meg SCSI Sider from Lee. It works great for everything I've tried, except AppleWorks. Every time I try to boot AppleWorks from the HD it bombs right after the initial screen. I tried recopying ProDOS and my system files from the original GS system disk onto the HD and tried it again—same thing. I tried recopying AppleWorks from the original disk (Version 2.0)—same thing. I tried booting from a 3.5" drive—works great! It will also boot from a 5.25" drive with no problems though I can't fit ProDOS 16 onto 140K and so boot directly into ProDOS 8. If anybody has a solution, or just an idea about how to fix this crashing problem, it will be greatly appreciated.

FROM LEE RAESLY

The following is from Open Apple (Tom Weishaar): "..... head programmer at StyleWare, says the problem is that AppleWorks 2.0 tries to startup New Desk Accessories, which it shouldn't do, since NDA's require ProDOS 16..." Could it be possible that you have NDA's in your files on the HD? Might be worth it to check.

FROM LAWRENCE HAIDER

Yes I have NDA's in my system folder under "Desk.Accs" but definitely not in my AppleWorks folder. I don't get the connection between AW and NDA's but I'll give it a shot. I sure don't like the idea of doing without my NDA's when using my GS programs. I just bought DeskWorks.

FROM LAWRENCE HAIDER

I isolated the offending NDA that was killing AW. It is the one called MiniFileUtility. As long as I have that one file out of my Desk.Accs folder on boot up, AW works fine. I guess it confused me because I downloaded the file from the TCS at about the same time as I got my Sider, leading me to think the problem was the fault of the Sider. It was a nice little utility NDA and I'll miss it, now that its gone to the great bit bucket in the sky. I hope someone writes something similar with more features—like formatting.

FROM JON THOMASON

AppleWorks makes a surprising amount of GS toolset calls. I checked it out for a while. Most of these are starting up and shutting down things that it doesn't need, and doesn't even use. It makes no Desk Manager calls, but it does start up and shut down. If you want to see if these make the difference, take your COPY, and use Block Warden or something to find the string $A2 05 03 22 00 00 E1 in Seg.M1 (this is the shutdown call), and $A2 05 02 22 00 E1 in Aplworks.System (this is the startup). Change both of these strings to $EA EA EA EA EA EA, and put back the MiniFileUtility. See if they still collide.

FROM LAWRENCE HAIDER

Jon, your little program patch to Aplworks.System and Seg.M1 did the trick! I reinstalled MiniFileUtil into my DA folder and rebooted, ran AW and Voila! No problems! I used Block Warden to search for the bytes you suggested and changed them all to EAs. It wasn't easy to do since this is the first time I have had to use Block Warden for anything, and it was a bit of a trial to figure out how to get Block Warden to search for the correct blocks. But persistence paid off and now my life has been made much easier. It's good to know people like you, even if it is only in electronic words. Thanks a bunch!

FROM LEE RAESLY

Glad your NDA problem got resolved and it was not the hard drive. I'm especially glad the "unique" solution was available on the TCS.

The More Things Change,
The More They Stay the Same!

FROM LEE RAESLY

Does anyone know whether there are any changes, mods or bug fixes in Claris's AW 2.0? How could you tell? Is it really the same 2.0 as we had from Apple Computer, Inc.?

FROM KEN DE VITO

Lee, I called them about a month or so ago and was informed that only the label has changed. This was in response to similar queries here at that time.

Better Bye—Better Still!

FROM DALE SMITH

All who like Bird's Better Bye: I have uploaded an adaptation of Bird's Better Bye that gives 80-column display and will display 32 files/directories for selection. It was written by David D. Ely and placed in the public domain for non-commercial use with Allan Bird's permission. The advantage of Better Bye is that it does not poll drives like the other enhanced QUIT codes (SQUIRT or SELECT).

ProSel—Better Too!

FROM DALE SMITH

I have just placed ProSel v3.4 and INFO.DESK 2.6 in Area 2 of the File Transfer system. The ProSel update will now park the heads of HD drives at the time the screen is blanked. It is handled

contd.

preferred margins. If the number is too great the printer will just overstrike the line again for however many characters are over the limit. Use Control-B followed by T16 to compress line spacing for some special effects and T24 to return to normal line spacing.

To access the MouseText characters, enter Control-B followed by an &; this command turns on MouseText; any uppercase letters entered from this point on will be printed as the MouseText characters rather than letters. MouseText uses all 26 uppercase letter plus the following punctuation marks =====> [ ] \ ^ _ @. The chart that accompanies most Beagle Bros. software has a good listing of the MouseText characters; they are very difficult to print out in chart form for this article.

After turning MouseText on with the Control-B, don't forget to turn it off with a Control-B $.

Meanwhile, those who really need boldface can still have it. Just enter Control-B and follow it with an !. This command can be used anywhere in the text. Use Control-B followed by a " to end boldface.

BONUS! With the Control-B we can now print in color in AppleWorks with an Imagewriter II. Simply enter Control-B followed by K (to turn on color) and a number from 0 to 6 (0 = black, 1 = yellow, 2 = red, 3 = blue, 4 = orange, 5 = green, 6 = purple). This command should work for one word or until it is turned off by selecting the default color (black). And you folks with Mutiscribe GS thought you had something on us AppleWorks users!

EXTRA BONUS! If we want to access the foreign language characters available on the Imagewriter, and if we have patched our AppleWorks so that we can use Control-@ (see InCider December, 1987, p.26), we can use our new Control-B to access these alternate character sets without resetting DIP switches.

Of course with our CUSTOM printer, we can access just about any of the Escape sequence functions available on the Imagewriter.

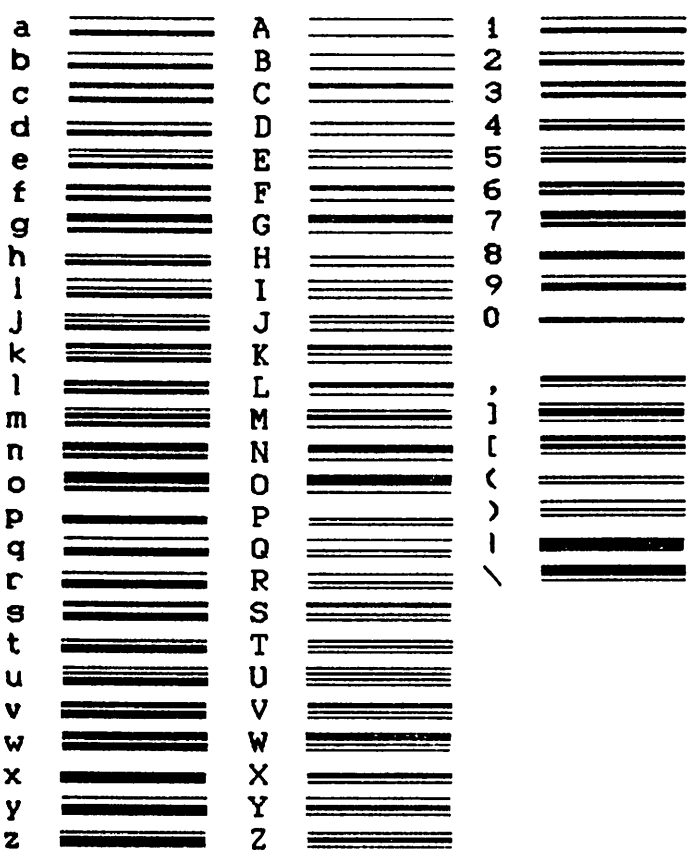
Summary of Control-B commands:

V0500g	prints a line 50 characters long of bit image g
&G	turns on MouseText and prints character for G
$	turns off MouseText and turns on regular ascii
K2	turns on color selection for red
!	turns on boldface
"	turns off boldface
T16	turns on compressed line spacing for solid lines
T24	turns off compressed line spacing

D Control-G Control-@ Spanish character set (see manual for others)

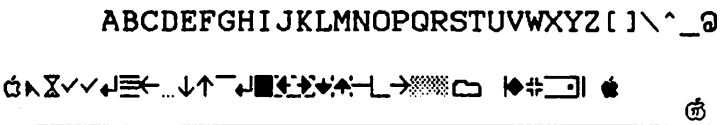
Bit Image Graphics Chart

To be printed only on a custom printer configured as above.



MouseText Characters Chart

Print only on an Imagewriter II as the above custom printer.



Best of the Apple TCS contd. from pg 31

merge accessory. I checked the Beagle Ultrafonts manual and it says it works with any standard Dazzle Draw-compatible DHR file. Since Thunderscan DHR files are usable with Dazzle Draw, it seems clear they're usable with Ultrafonts for insertion in AppleWorks documents.

3. Since they're standard HR or DHR files, you can certainly send them via modem, using either plain XMODEM or Binary II. There are lots of Thunderscan images on CompuServe, for instance.

4. As for Print Shop & NewsRoom—I believe there are utilities which will create PS and NR graphics from standard DHR or HR files. Since Thunderscan images can be saved as DHR or HR standard files, I assume they can be made into PS or NR graphics the same as any other DHR or HR files.

FROM GLEN HUMPHREY

The Thunderscan creates two kinds of files: a special binary file that can only be used by the Tscan software and the standard Apple][graphics files—HiRes, Double HiRes, and on a IIGS—320 and 640 modes. I'm not familiar with UltraFonts but I gather it inserts HiRes pics into a text file printout? I've been using Tscan on a IIGS—the 320 and 640 mode SHR graphics are very nice but I can't say as much for the HR, DHR mode due to the lack of a greyscale. On a //e it's really only suitable for scanning simple line drawings—photographs come out looking very "blocky"—and you'll probably need to edit the scans with a paint program.

BIT IMAGE GRAPHICS ON THE IMAGEWRITER

(and Almost Any Other Printer)

by Ray Settle, The Annapolis Slice of Washington Apple Pi

Some months ago I was trying to decide whether I should renew my subscription to Sage Production's *AppleWorks Journal* when I received an issue that contained one article which instantly made up my mind. The article detailed how one could access the graphics characters hidden inside the Imagewriter printer (and in fact in most dot matrix printers). While the article was a bit light on specifics and apparently wrong in some cases, it awoke a curiosity in me that led to some extensive experimentation which I will now share with my readers.

There are 79 various bit image graphics available to the knowledgeable user through AppleWorks plus another 32 MouseText characters available to Imagewriter II users. The former set is ideal for dressing up reports and letterheads with formal lines while the latter set allows a little more frivolous and playful decoration of documents, such as, arrows and apples.

To access these graphics (a sample chart accompanies this article), the AppleWorks user must go through the trauma of setting up a custom printer (a printer code guide also accompanies this article), but the trouble will be well worth it and needs to be done only once.

Boot up a fresh backup copy of AppleWorks and select 5. Other Activities from the main menu. From the Other Activities menu select 7. Specify information about your printer(s).

From this menu select 2. Add a Printer (maximum of 3). NOTE: if you have 3 printers already or if you have a custom printer, delete one (This is a back up disk, right?) so that you have room to add another. From the printer selection menu, select Custom printer.

Now the fun begins! When one chooses to configure a custom printer within AppleWorks, one must enter all the printer codes manually, so not only must we enter the codes to access the bit image graphics, we must also enter codes for characters per inch, underlining, sub and superscript, etc., if we want the custom printer to be as functional as our other printers.

Once we select the custom printer, AppleWorks asks us to name the new printer (Bit.Image is my suggestion—no sense in being subtle about it) and presents us with the Change a Printer menu. Selection 1 on this menu should be set to NO; selection 2 set to YES; and Selection 3 set to NO. Platen Width can be whatever your printer's width is (mostly 8.0). Selection 5. Interface Cards should be selected and Control I 80N entered for Apple IIc and IIgs serial ports, and for any Apple II super serial card. Other interface cards may require some other codes; check the interface card manual or a good AppleWorks book.

The next selection, 6. Printer Codes should then be selected to get to the printer codes menu. From this menu select characters per inch and get out your printer manual and find the CONTROL and ESCAPE sequences. (The Imagewriter manual has these conveniently located on a tear out quick reference card in the back of the manual.) Setting up a custom printer can be a frustrating experience especially since the codes listed in the manual don't necessarily do what they're supposed to do; there are a few other codes that need to be entered to make them behave right. For one thing, we have to turn off one code before the next code functions properly. The manual doesn't tell you that. Below are the codes to enter for the characters per inch for an Imagewriter I or II printer (and probably for most parallel printers also since most interfaces will lie to the printer and make it think it's an Imagewriter).

4 Characters per inch.....Escape n Control-N
5 Characters per inch.....Escape N Control-N
6 Characters per inch.....Escape E Control-N
9 Characters per inch.....Control-O Escape n

10 or more characters per inch...use the codes in the manual preceded by a Control-O to turn off any headline command (Control-N) that may have been given previously. NOTE: The hyphen (-) which follows Control in these commands is placed there by the computer; IT IS NOT TO BE TYPED. REMINDER: To exit each command sequence, typed the ^ symbol (shift-6).

By the way and while we're at it, as a special bonus for Imagewriter I users, enter an 11 Characters per inch code of Escape ! to get a command that can turn on double strike printing for your entire document. Great for teachers doing dittos! Just enter that command at the top of your document and anytime after exiting another print size. Since there is no such thing as 11 characters per inch, the size defaults to 10 cpi, but the printer receives the command to double strike from that point on until the cpi is changed.

After the Characters per Inch codes are entered, enter the codes for any other favorite print formatting commands, such as, underlining and superscripting but do NOT enter any codes for BOLDFACE BEGIN. We need that one for the bit image command. If you really can't live without boldface, don't worry; it's still available but in a slightly different way.

After entering all the other printer codes you desire and we are back at the Printer codes menu, select 3. Boldface, Subscript and Superscript. From the next menu select 1. Boldface Begin and enter just Escape as its code. This code will allow us a wide range of printer commands form within AppleWorks and is the key to accessing the bit image and MouseText graphics.

Our custom printer should now be complete. Escape out of the various levels of menus until we're back at the main menu. We are now ready to enter bit image printer commands from within an AppleWorks word processor document. To do so, follow these instructions.

To print a line with the special graphics simply enter a Control-B (indicated by a ^ printed on the screen) followed by a V (to activate the bit images), four numbers (to specify how many characters to print—0550 prints a whole line with one inch margins on my printer), and an upper or lower case letter or any of the following punctuation marks =====> , [ ] { } I \ <===== to indicate which character to print.

The whole command should look like this ——> ^V0550g.

Experiment with the line length to get it just right for your

contd.

correlation (linear association, etc.) multiple regression. I have the student version which is limited to 1000 numbers per case. Oops overlooked more functions: simple inference (confidence intervals, hypothesis tests, bonferroni adjustment), comparing two samples (paired data, formulas, displaying differences), comparing the means of several groups, and Two-Way ANOVA. Maybe someday I'll know what all this stuff is. Hmm. Any more questions? Yes, am still using Tandy 100 fine, with MacDOS. But your cable hook-up would probably have been sufficient for me, instead of the extra cost of the drive and MacDOS that I went into. Oh, well. It's easy anyway.

(To Be Continued Next Month)

THE SESAME STREET CRAYON (//e): A Review

by Adam Briggs

The Sesame Street Crayon is an educational game for children. The game is really only a computerized coloring-book designed to incorporate fun and learning. When you open the box, you find inside a manual, a disk, and a full-color poster of everyone's pal from Sesame Street, Big Bird.

The instructions do not seem clear at first, but after you boot the program, it becomes "child's play." When you start you are given the option of changing setup, or going directly to the program. If you choose the setup option, it gives you a list of input devices to choose from. The program works very well with a graphics tablet, mouse or joystick, but if you choose to use the keyboard, the movement of your coloring icon goes painfully slow, and many children would grow impatient. Because of this, Polarware added some extra commands incorporating the 'control' key, but these commands could be too complex for some children to learn, since they must be memorized if they are to be used.

After choosing an input device, the program will ask you to choose your printer setup. The only thing that I found wrong with this is that the program won't print to an Epson printer. If you use a printer, I recommend that you try an Imagewriter II. One of my favorite parts of the program is that you can set it up to make a calendar. This could help your child learn about days and weeks by having him or her make their own calendar! The main drawing screen is colorful beyond compare and provides an interesting way to teach children, or just keep them occupied.

There are three volumes of The Sesame Street Crayon, and I believe they have the potential to delight children of all ages. These programs solve the problem that comes with old-fashioned coloring books: they never run out of pages. With these programs, you can color pictures, save your successes, delete your failure, and print your favorites. You can also print blank pictures to color in later. This is a great program. I congratulate Polarware on their success.

PROGRAM INTERFACE SIG (PI-SIG) NEWS

by Robert Golden

April's meeting on Monday evening the 4th was in the Washington Apple Pi conference room. We gathered together to observe and discuss early aspects of a program under development by Jim Winter for the Apple IIGS, to share ideas, field questions, and discuss the latest in our special area of interest.

In the first case, the demonstration of a relational data base program involved the use of a dialog box for installing information into the program and for manipulating the data more flexibly than would be done in some non-relational types of data base programs. The discussion of the method expanded into examples of practical applications.

During the Q and A session, we learned of the possibility of a bug in an APW routine, and discussed approaches for finding the problem, using analogy and the process of elimination. This session included remarks on classic desk accessories; "Mouse Locator" by Gary Little, for location of the cursor by detecting it's coordinates; and the Orca source debugger for Pascal.

PASCAL NEWS

by Robert C. Platt

The next meeting of the Pascal Interest Group (PIG) will be on Thursday, May 19, at 8 p.m. New members are always welcome.

Pecan software. Pecan has been busy expanding their product offerings. Historically, the p-System (which is the basis for Apple Pascal, Apple Fortran, PILOT and even Wizardry) was based upon 16 bit addresses. However, in order to support the large RAM memory which is now available on microcomputers, Pecan is offering a p-System which supports 32-bit addresses. They call it "Power System-32" although it is also known by its code name of VLM. The system is now shipping for the Mac.

Pecan is also offering a multiuser p-System called "Poly" which supports multiple user access to shared files by locking individual records when they are to be updated by a user. Pecan has also begun to support c compilers on the p-System.

Although the popularity of the p-System has declined in America over the past few years, it appears to be growing in Europe. Pecan announced that the Open University in England will be using UCSD Pascal to teach programming to 20,000 students.

IIgs. There has been considerable debate lately as to which Pascal compiler is best to use with the IIgs. The problem with Pecan's implementation is that the long-promised support of the ROM tools has yet to ship. I have been using TML's stand-alone Pascal Compiler and have not yet encountered any problems. It appears that TML and Orca/M are currently the way most IIgs programmers are going. Come to a PIG meeting to share your views on this and other issues.

Tulane and the University of Arizona's school of engineering, as a tool for teaching project management, engineering economics, and business management strategy. It received the Award of Merit for innovative software at the Summer 1987 Consumer Electronics Show. Published by Final Frontier Software, it sells for $59.95, but it is only available for the IBM.

FROM JESSICA WEISSMAN ON 01/08
Where locally can I get Space M*A*X? Also, I believe that ed simulation is one of the best ways to use a computer—it is one of the things that can't really be done any other way. Even something simple like a chem lab with reagents and reasonable ways to simulate common experiments makes sense.

FROM PAUL CHERNOFF ON 01/10
I would like to see SPACE MAX in action, both the software and in a learning situation. Does anyone here have a copy?

Apple Grants

FROM PETER COMBES ON 12/31
I had a call from a corrections center in Virginia that does remedial education using one (!) Apple //c. It wants to apply to Cupertino for a development grant under the "Equal Time" program. Does anybody have any experience of this program?

Software

FROM PETER COMBES ON 01/28
I see from our files that we have yet to take up an offer by Mindplay of a review copy of "Ace Reporter". We are still waiting to receive the new version of Robotmath, but we could ask for "Ace Reporter" to fill in the time while we are waiting. Who would like to review "Ace Reporter"? Details follow: "'Ace Reporter' is one of our most popular programs, but many people have expressed the feeling that their students wanted to go one giant step further to create their own story games. With this new edition, we have added a second side to the disk to hold up to twenty original stories. We think you will find this to be a SECOND EDITION worth noting. Ace Reporter is available for the Apple II family of computers (including the IIGS). I hope you will include this second edition in your 'New Software' column."

"..... MindPlay is happy to present ACE REPORTER, SECOND EDITION. Ace Reporter, a highly acclaimed program for learning to read for details and main idea, now includes an easy-to-use editor for creating original stories! With room for twenty additional stories on side-2 of the disk, teachers can add, edit, delete and save special stories for use in every program. The editor is designed so that children, too, can easily enter their own teletypes, interviews, who, what, when, where and why facts, stories and headlines. Once the stories are created, players are ready to uncover the facts before the paper goes to press." "Apple II Series (including the IIgs)—includes backup disk, user's guide and teacher's guide."

FROM DALE SMITH ON 02/01
I just got my March issue of A+ today. The LEARNING CURVE article by David Thornburg has an interesting discussion of a program that does for the II's much of what the HyperCard does for Macs—except that it's been available for TWO YEARS. The program is called TUTOR-TECH published by Techware, Inc. (P.O. Box 1085, Altamonte Springs, FL 32715; [305] 834-3431). It is intended for authoring tutorial materials. Check out the article; it's interesting.

FROM ED DONNELLAN ON 02/19
Can anyone recommend an elementary statistics program for a bright 13 year-old boy with an enhanced //e and 128K? Any thoughts appreciated.

FROM FRANK SORNATALE ON 03/12
I was wondering if there is any software programs available that teach youngsters (10-15) about computers, their architectures and how they work. If you have any info on general computer learning on computers let me know.

FROM PAUL BRUENING ON 03/12
MECC has a program just like the one you want. It is a very simple explanation to using computers. See the previous message (150) for the address. I can't recall the exact name ... (old age I guess).

FROM CHARLES REILLY ON 03/15
Have procured Datadesk, a stats package for the Mac distributed by Kinkos. It is very friendly compared to other stat packages. I am glad to field questions about the package, as I'll be using it for a class and should (sic) shortly know more about stats and this program.

FROM HOLGER SOMMER ON 03/15
I would be very interested to hear about this statistics program. I am using StatWorks and StatView for my statistics analysis. BTW: I got a MacII two weeks ago and start now to get into color graphics—got any hot stuff? I also bought a color printer (HP - PaintJet)—fantastic colors.

FROM DAVE GIBSON ON 03/16
Can StatWorks and StatView support color graphics on the IW LQ ? I have to occasionally do presentation graphics and something like that would be interesting.

FROM HOLGER SOMMER ON 03/16
I use Statworks and Statview to develop the data and Cricket Graph for the plotting on a HP PaintJet multi color printer. I have not tried to plot with StatWorks/View in color since the graphs don't look that nice as the once from Cricket Graph.

FROM CHARLES REILLY ON 03/17
Holger, Datadesk is developed for the Mac by two Cornell Univ professors (Drs. Velleman). The program uses a 'desktop', like a mini-finder, on which appear icons representing variables, outputs, notes, bundles of data, etc. for a particular project. The following functions are supported: displaying data (histograms,scatterplots, etc), simple summaries (spread, order stats, biweight,mments,etc.), transformations (derived variables, expressions,probability lots, algorithms), manipulating variables (sorting, rankng, generating patterned data, selectors, random numbers and simulation (distributions,bernoulli trialsetc.),contingency tables, simple regression (ANOVA, etc.),

contd.

year 'weighted' GPA's where an Honors credit counts for a little more than a non-honors class credit. The colleges receive both regular and 'weighted' GPA's in the student's record. The inflation of grades is a serious problem, mostly due to the falling expectations of teachers (myself included) AND parents and the public in general. It is unfortunately a 'sign of the times' when teachers hear more questions like "How dare you give my child a failing grade, What did YOU do wrong?" Sounds like it's not too far away from our first lawsuit in failing to educate a child.

FROM DAVID GURSKY ON 01/21
All I can think to do is shake my head.

FROM LEE RAESLY ON 01/22
Well, I believe that GPA is worse than tests, and I have worked with a lot of tests in my profession, as well as a Teacher (Yes, I taught high school, even if you can't tell it from my spelling!) However, GPA does tell something. What it tells is the degree that an individual will do the kind of studying required for degrees. It also measures something else, the degree that an individual will put up with the stuff that you have to go through in American Education. But it all comes down to whether the student is willing to achieve an education. Maybe we could have the first lawsuit be a teacher suing a student for failing to get an education! See YOU at AppleFest May 20-22!!

FROM BILL HUGHES ON 02/16
Paraphrased from a quote I heard a while back: A college president is addressing a group of professors. Be kind to the 'A' and 'B' students while they are here; they will bring fame to the college, and will return to teach. But also be kind to the 'C' students—that's where our endowments come from!

FROM BILL HUGHES ON 02/16
If old stories can be believed one of the reasons that SAT's became important was that a GPA of 3.5, etc. from different schools was not reliable and that it was very confusing for colleges. Enter the SAT's with the intention of having a standard scale that institutions could look at when judging admittance. Most colleges do NOT determine entrance on SAT's alone. Nor is strict following of the GPA. They also use class rank. I am currently reading NONE OF THE ABOVE, a book about the SAT. I probably won't read it entirely—too much like a text book. In regard to the SAT test itself. I could have sworn that there were trig questions on the one I took in high school. I was talking to someone the other day about it and was told that there aren't trig questions on it? I'm just curious. Does any one else remember? How about the recent ones?

FROM HARRY ERWIN ON 02/17
I think there were trig questions on the math achievement test, but I don't remember their being on the SAT. BTW, my 13-year olds got 1100s on the SAT last year when they were applying to the John Hopkins program for gifted youth So it can't be that hard. But then, my wife and I have never had a TV in the house, and reading took its place for them.

FROM ART WILSON ON 03/02
Bill, I stated earlier on in this thread that GPA is not necessarily a good indication of success in industry. So the president has it at least half right!

FROM HARRY ERWIN ON 03/04
And that's about his normal rate—although you can get that by using a coin.

Biology Texts

FROM HARRY ERWIN ON 01/07
Gould is a bit of an activist, but since I do work in the field and I've seen the book, I tend to agree with him.

FROM PAUL CHERNOF ON 01/07
In case anyone is wondering, Gould's criticism of textbooks (and this goes beyond biology texts) is that they all copy from one another. Lots of lies continue to be circulated via the school because textbook writers don't check their facts often enough. Gould looked at a minor statement, that decendents of horses were the size of fox terriers (and who here has ever seen a fox terrier and knows the average size) and found that statement to be mindlessly printed in every (or almost every) biology textbook. He also mentioned another example based on the genetic inheritance of intelligence which everyone bases on studies which have been discredited (due to fraud).

FROM BERNIE URBAN ON 01/07
Seems like you are an advocate of the theory X (or is it Y) approach to management. The Japanese seem to surpass mediocrity by developing a team spirit.

FROM JIM BUTTERS ON 01/07
True. Just as long as we accept the opinions and actions of these "reasonably intelligent people" we will continue to produce mediocrity or less in our students. As Tom Peters tells us, it's time we began to DEMAND excellence. Most of the system problems in society are "vicious circles"; i.e. self perpetuating and self sustaining. The stable environment has achieved input and output equilibrium. As you said, to secure change you must break into this vicious circle with exterior forces: just shaking things up may not accomplish the desired goals. Continuous pressure in the desired direction, and persistent follow-up is also required.

FROM JIM BUTTERS ON 01/07
The small horses theory is well disposed of in an excellent display at the Smithsonian's Natural History Museum on the mall. It's well worth the trip down to see it. (Development of Mammals subject heading.)

FROM DAVE GIBSON ON 01/19
Descendents of horses or their ancestors??

FROM HARRY ERWIN ON 01/22
See Science and Technology for results on optimal rate of behavioral evolution.

Educational Games

FROM JIM BUTTERS ON 01/08
SPACE M+A+X has been selected by Harvard's grad school,

contd.

level. That measure is GPA. It still is not perfect, but at least it is measured over some time, rather than at one sitting. It is also the conglomeration of numerous measures. Additional information can be gained about each area of study. The limitations inherent in using GPA are the variety of grading practices between schools and teachers, and the fact that most grades are awarded through testing of some sort anyway! There is the option, however, to grade on other types of assignments. The aggregate should be more meaningful than a single test. It would be interesting to see if there is a correlation between GPA and SAT or GRE scores. Does anyone have this information? Interestingly, while I do believe GPA is a fairly good indicator of academic potential, it is not necessarily a good indicator of success in the working world. That's a different story...

FROM BERNIE URBAN ON 12/31
I learned to think after I left college. Programming and systems analysis was my mentor.

FROM HARRY ERWIN ON 01/07
I have an interesting problem in this context: a son who aces all his tests, but due to mild cerebral palsy has never been willing to do his written work. He brings home some of the strangest grade cards you've ever seen. How do I convince him to break down and do the written work. He's in 8th grade and unless he does something about that, he won't be getting into the college prep curriculum.

FROM HARRY ERWIN ON 01/07

When I was in high school (around 2500 students/3 years) 2 students pulled a 4.0. I was seventh in the class with 1546 on the SAT and I had a 3.6 GPA. I understand from some of the kids in scouts that somewhere around 20% of the seniors in Fairfax County are in the 3.8+ range now. So don't tell me GPA is a good indicator.

FROM JIM BUTTERS ON 01/07
Twelve years ago I had a similar problem with a mildly dyslexic child who could verbally "ace" the tests, but had reading problems. The solution was "tough love" and tutorial help. The "tough love" was required to wean the child away from the "pot smoking" peers who kept convincing the child that hard work was not necessary, and the tutorial help from a professional psychology/educational team was required to undo the poor reading techniques taught by our wonderfully inept Montgomery County educational system in the 1960s. Four years of effort paid off; the child learned to read and continues to advance in academic skills. Mental discipline is difficult to teach children; but joyful and rewarding success with written material has to start at a very early age, and we parents have to be INVOLVED every day for the child to achieve this success. Good luck with your 8th grade challenge!! (Patience and persistence—and more patience and persistence.)

FROM DAVE LAVERY ON 01/08
Hopefully, this answer will last more than a few hours before the TCS dies and it goes away like several of my past responses. I agree with you Harry. Grade point inflation over the past two decades (not just the past few years), has decimated the utility value of the GPA for evaluation of academic ability. As an additional example, I'll cite the case of Herndon High School in Fairfax County. In 1972, there was only 1 graduating senior with a 4.0 GPA. By the time I graduated in 1977, there were 7, and by 1982, there were 12. At the same time, the mean GPA for the entire student body went from 2.55 to 2.70 to 2.83, respectively. During this entire period, the sizes and composition of the student bodies remained fairly consistent (around 2400 students total, 600 per class). While saying that just "grade inflation" is the cause of a poor system for evaluation of potential college and graduate students (anyone really remember how this thread started?) is a severe oversimplification of a complex problem, it is valid to say that the GPA increases are an indicator of the duration and breadth of the problem.

FROM ART WILSON ON 01/08
Although grade inflation is certainly a problem, I still feel GPA is the most reliable indicator available, although I never claimed it was perfect. I still feel it is a much better indicator than standardized tests, because it represents a cross-section of an individual's ability over time, rather than a single shot examination. I don't believe there is a perfect indicator, or even a "best" indicator of a person's chance of success in college. However, grade inflation affects every student, leading to more difficulty in distinguishing between them—not invalidating the measure altogether. The problem with instituting a more effective predictor is that it is expensive—the best way may be to examine all test results, GPA, and interview the prospective students—some colleges already do this. But people excel at different ways of being measured—any single measure favors those people who are most comfortable with that measure (e.g. cultural bias on IQ tests). Grade inflation is prevalent, both in high school and in college, and it will take some effort on the part of teachers and administrators to correct that—it isn't the students' fault. Until the correction is made, maybe there is no best measure except retroactively—success in college (however that is measured) indicates an ability to succeed in college!?

FROM DAVID GURSKY ON 01/09
But what was the COMPOSITION of your class? The influx of Vietnamese in the Wasington area has impacted certain school districts. Their children are highly motivated to get good grades.

FROM PAUL CHERNOFF ON 01/16
The latest city paper has an interesting article on SATs. There is a "improve your SAT score" course out there based on the assumption that the SATs are racist and sexist in orientation (plus that there is a strong corrolation between family wealth and SAT scores) and tries to teach students how to take the test, as opposed to teaching new knowledge. The person running these courses dislikes SAT, and EDS dislikes him.

FROM PAUL BRUENING ON 01/21
Using GPA as a measure of achievement is a very sticky issue. In Montgomery County, there has been a long argument about even the correct way to calculate the GPA. Kids who are in Honors classes and receive a 'B' may have done more work than another kid in a 'non-Honors' class. So the county started this

contd.

BEST OF THE TCS EDUCATION BOARD
by Peter Combes

SATs and GREs

FROM JIM BUTTERS ON 12/29

Your message about the individual's responsibility struck a very tender chord with me. I agree essentially; but it has to begin at such an early age that only our PARENTS (or those who control our very early years) can have any influence on the patterns of learning instilled in us as children during the critical formative years. How many parents set "the learning example" for their children? What about society's role? Where are the role models in the beer comercials on TV? What sort of example is provided by our political leadership? (What a learned bunch they are!!) I believe that all parts of our society; parents especially, but also local and national governments must share in the future of education. However, education is a lifelong effort. It doesn't stop at a certain grade or year or level. It goes on for as long as we draw breath. It is a joyful quest, and an exploration of endless frontiers.

Just for discussion purposes; how do you judge an "educated person"?? What minimum levels of understanding, of knowledge, of "culture", of literacy, do we accept? In this modern age are the old standards of the liberal arts education outdated? (I personally don't think so, but you may disagree with me completely.) My personal pet peeve is the monstrous neglect of geography and history in our public school systems; however, I fully realize the problems our public school teachers face on a daily basis with discipline, clerical overload, supervisory restraints, etc. make the subject of the "educated person" irrelevant for most of them. (It's hard to get interested in draining the swamp when you are knee deep in alligators.) The subjects they taught back in the 1940's included music, art, history, geography, literature, science, mathematics, English, and physical education in elementary grade schools. Is it different today? Why don't the children know that Canada is north of the U.S. and that Mexico is to the south. What has happened? Do you have any opinion about Secy. Bennett's latest curriculum proposal?

FROM DAVE LAVERY ON 12/29

You will find no argument from me on any of your points. The standardized SAT and GRE exams have absolutely no value as either intelligence or ability evaluation tools—their sole worth is as a measure of a person's ability to take tests. Unfortunately, especially at the high school and undergraduate level, the possession of exceptional test-taking skills is usually the only requirement for "exceptional" academic performance. Any type of accurate tool for measuring a student's apptitude for future "learning" ability simply does not exist. So we are left with what we have—a series of standardized tests, evaluation exams that begin in the second grade (anyone remember the old SRA story-readers?), and progress through post-grad and professional levels. Are these the best way to measure what a person is capable of? I think not, nor do I see much argument from anyone on this board. But are they the best tools that we have available? I'm afraid so.

Your points concerning cross-cultural testing problems are very valid. These comments apply not only to educational testing, but to almost every other aspect of cross-cultural communications. Ever had a conversation with someone from Saudi who insisted on standing four inches from your face and was "invading your space", or with a Japanese who constantly averted his/her eyes? No threat or insult was intended by either, that is simply a cultural difference that many of us are not accustomed to, and will frequently misinterpret. The same holds true with the standardized "American" tests—without being intentionally xenophobic, we limit the ability of immigrants and foreign nationals from fully participating in academic and professional environments simply because they may give an unexpected answer and we cannot appreciate the context of that answer. But, perhaps, the worst case is that of the same phenomena observed within the national boundaries—in which this same type of cultural conflict becomes evident when examining affluent suburban students against poorer inner-city students against middle income mid-west farm children. Do these same type of conflicts exist? Absolutely. In point of fact, one of the main criticisms against the SATs levelled in recent years has been by coalitions of inner-city black parents, who (perhaps rightfully so) contend that the structure and style of the questions on the SAT exams unceremoniously precludes the potential for their children to do well on the exams. Anyway, I will get off my soap box now, and ask for more comments and observations from everyone else...

FROM PAUL CHERNOFF ON 12/30

I remember those SRA reading series. Very, very boring.

FROM ART WILSON ON 12/30

I agree that poor teachers can turn a student off and make it very difficult to learn a topic. It is also amazing in reverse, how a particularly good teacher can make fascinating a topic you had little interest in. These points apply to individual courses, but of the three colleges I've attended, none of them was clearly biased in either way. Overall, I did learn to think (and it's a good thing too—I have a pretty bad memory!) and the teachers did encourage students to learn to think, in general. I used to think that only technical regimens took this approach to learning until my wife became an English major—I then appreciated a liberal arts education as never before. Unfortunately, it appears few others do.

FROM ART WILSON ON 12/30

Paul, I thought intelligence is what an intelligence test measures!? (By definition!)

FROM ART WILSON ON 12/30

I agree that the SAT and GRE's (I've taken the former, not the latter) are a measure of test-taking ability rather than a true measure of academic ability. However, I do think there is a better measure that can be used to evaluate an individual's chance of success in academic endeavours, at least above the high school

contd.

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system. It becomes an added effort to learn the Mac, rather than the blessing it is today.

The way I see it, the main advantage Apple will derive from protecting the Mac's interface from imitation is that it will buy a little extra time to polish the Mac interface, add true multitasking, build more of a lead in easy-to-use applications, and so on while Microsoft and IBM are forced to waste time re-engineering Windows and the Presentation Manager. But will that lead be enough to protect Apple when Microsoft comes out with its own unique and powerful interface?

A solution?

I don't know what the result of this lawsuit will be. It's possible that Apple has no intention of actually having the case go to trial. They may be using their legal clout as a bargaining chip to wring concessions from MS and HP. Those concessions may include major changes to the look and feel of Windows and New Wave, or they may involve a more stringent version of the current MS/Apple license. Another possibility is that Apple may be using this suit as a delaying tactic in order to keep IBM's Presentation Manager off the market while Apple builds up its lead in interface technology.

It might be to Apple's ultimate advantage to have the Mac interface become standard across platforms. The Mac would lose some of its uniqueness, but if Apple continues to evolve that interface to become even more powerful and easy to use, the Mac can stay a step ahead of the competition. Apple will be forced to rely on superior engineering and vision to keep its position as the innovative alternative, but I think it can prevail. Innovation is Apple's real strong point and this has to remain its focus if it is to survive, no matter what the outcome of the lawsuit.

Apple is not a charitable institution. It is a business and as such wants to make scads of money. That's the American way, along with truth and justice. Apple deserves to profit from its pioneering user interface work. I'm not certain that this is the best approach, but here's one possible solution to the controversy: Microsoft, IBM, HP et al want their systems to look like the Mac. Why doesn't Apple just up front offer licenses to those companies, not just to aspects of the Mac interface, but to the whole ball of wax. Apple could assist Microsoft in designing a new Windows and Presentation Manager interface that functioned exactly like the Mac. Apple could also make the Mac interface available to vendors of competing UNIX systems as an alternative to X-Windows, NEWS, etc. In return, Apple would receive some licensing fees and acknowledged leadership in the microcomputing world.

This certainly isn't a perfect solution, and it's probable that none of the interested parties would agree to it. I'm sure that Apple doesn't want the family pearls to be cast to the IBM swine, and I doubt if Microsoft, HP and IBM would want to acknowledge Apple's leadership this way. But the alternative is continued chaos in the user interface area and a possible loss of influence by Apple. This solution would probably be well-received by both PC and Mac users and would heal some of the damage to Apple's industry and consumer relations that have resulted from the suit.

I doubt if Apple can stop other interfaces from looking at least somewhat like the Mac's, and it certainly can't stop other companies from developing alternative graphical interfaces. Apple should take a leadership role in the industry now before it's too late. Licensing the Mac look and feel could solve a lot of problems.

(The views stated in this column are my own and do not necessarily reflect those of either Washington Apple Pi or of Micro Dynamics, Ltd.)

Bill Hole is the author of PostHaste™ and has served as lead programmer for Micro Dynamics MARS™ and other major software products. He is a system analyst for Micro Dynamics, Ltd., the largest Macintosh development firm in the Washington, DC area.

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MACINTOSH BITS AND BYTES

by Lynn R. Trusal

Macintosh Facts and Rumors

Target Software has informed registered users that "Mentor", its upgrade to "MacLightning" has been terminated by the developer. Target Software still promises to provide indefinite toll-free technical support. They are also offering a $145 discount off the retail price of "Scoop," their new desktop publishing program. From the reviews I've seen of Scoop, that is no bargain and mail order companies will offer at least that much off.

The Apple color monitor is generally judged as the best of the lot, but it definitely has a problem with occasional "jiggle." Both my monitor at home and work occasionally jiggle to some outside interference. At least I think it is outside? The one at work does so at the same time each morning and afternoon so it is apparently responding to some outside source of electrical activity. I have not been able to determine just what it might be. I just read that Apple is going to offer some kind of software fix for the problem, which implies the problem is internal.

Two local computer companies are combining efforts to create their own portable Macintosh at a cheaper price. That is all I have for now and we will have to wait and see if their efforts culminate into a marketable product.

Have you wondered why the new analog monitors cost so much and how they can display gray scales or color hues? The answer is "analog" versus "digital". Analog monitors can vary the intensity of each dot or pixel on the screen which can simulate gray scales or different hues of the same color. Digital monitors can only display a dot as "on" or "off," and are not capable of changing the dot intensity. (Source - *Publish*, March 88, PC Week, March 8, 1988).

IBM is losing market share to both Apple and Compaq. A recent survey of the *PC Week* Corporate Advisory Panel indicates IBM's share of planned purchases for the next year declined 25% over a five month period. The decrease went from 65% to 49% while Apple increased from 7 to 14% and Compaq doubled from 5 to 10%. In terms of future planned purchases, the Mac SE increased 340% and the Mac II 240% between August 1987 and January 1988. Others are saying that IBM's 1987 Annual Report financial figures don't jive with their having shipped one million PS/2 machines. They must be sitting in a big warehouse somewhere! Hawkeye has finally joined the IBM crew. One commercial shows him floating in a rubber raft in a flooded computer room. Maybe he's practicing going down with the ship?

Apple Computer is owned by 91 mutual funds making it the most popular among mutual funds of any of over 400 computer related companies in the United States (Source - *Investors Daily).*

Apple Computer has bought Network Innovations Corp. which makes connectivity software for a rumored 10 million dollars. More specifically, the CL/1 Developers Toolkit which gives developers the ability to make personal computer applications work with programs based on host mainframes. This is apparently more of Apple's overall strategy to increase connectivity of its products with outside computers. Network Innovations Corp. was founded by Paul Weinberg and Jim Nourse from Stanford University. They were the authors of the 1981 book called "The Simple Solution to Rubik's Cube," which sold for $1.95. With the income from the book, they founded Network Innovations Corp., and the rest is history as they say. Network Innovations Corp. will become an independent subsidiary of Apple. The purchase is considered the first outright acquisition by Apple of another firm, although Apple also bought Cadmus Computer several years ago and deep sixed Cadmus's solution for Macintosh compatibility (Cadmac). It was apparently a "C" based version of QuickDraw. (Source - *Investors Daily, USA Today, MacWeek - MacInTouch Column).*

The thin line running through the bottom one-third of the Apple (Sony) color monitor for the Mac is actually a thin wire that holds a "mask grid" in position inside the monitor. It is thought by many people to be a defect. Although it is hardly noticeable, I would have thought they could have found a better way. (Source - *MacWeek - MacInTouch Column).*

My congratulations go to *PC Week* whose publication policy has finally fulfilled its name! A year ago *PC Week* used "The National Newspaper of IBM Standard Microcomputing" as its byline. In 1988, that byline has been changed to "The National Newspaper of Corporate Microcomputing." The new byline reflects a policy change that states, "We have expanded our news coverage in response to corporate microcomputer users' strong interest in technologies outside the DOS world." This strong interest largely translates into "Macintosh" over the past six months. It is finally nice to hear that someone outside IBM acknowledges that "PC" has always meant "personal computer" and not IBM! Maybe some day IBM will acknowledge that too!

QuickerGraf

Andy Hertzfeld has done it again. You may have read about his new utility program named "QuickerDraw." It has been renamed "QuickerGraf" because of objections by Apple to use of the "QuickDraw" name. Apple will include it with System upgrades in the fall, but it is available now on GEnie and CompuServe. On GEnie it can be found in the "Macintosh Roundtable" as file #8421. You can search for it by choosing the "find file" option and searching for it as "QuickerGraf." It takes about 10 minutes (27K) to download at 1200 baud. It is compacted using Stuffit so you will need that utility to unpack the program. QuickerGraf has been licensed to both Apple and Radius, Inc. but Andy also maintained his control of the code like he did with Servant. The program allows QuickDraw routines to run up to 5 times faster and Andy has included a self-paced demo to illustrate the difference between color QuickDraw graphics with and without "QuickerGraf enabled. Benchmark results provided by Andy in the demo claim from 100% (simple pixel pattern fill, no clipping) to 2442% (blend fill mode, simple pattern) improvement in speed. Keep in mind that QuickerGraf only works with a Mac II in 8 bit color mode which requires the extended video RAM. I gave it to a friend whose genetic

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engineering programs for the Macintosh ran much faster because they were QuickDraw intensive. He was impressed by the increase in performance.

Making Your Own Business Cards

Many readers have business cards which are a sign of established business employment. The Japanese have developed the art of business cards to a high art form and even Japanese students have caught the business card fever. If you are a business man visiting Japan and don't have a business card to exchange, it is considered bad taste. You also know that commercial printers will not usually print less than 1000 cards and the more information you want on the card the more it costs. Graphics, logos, and color often doubles or triples the cost. I would like to suggest that you can make your own business cards on the Macintosh.

An appropriate business card can be designed using any number of Macintosh text or graphics programs including Cricket Draw, PageMaker, Microsoft Word, Full Paint to name a few. One of my co-workers used Cricket Draw to design a large letter acronym and the PostScript grate feature to make white lines through the top of the large letters. He then added the rest of the text in several font styles, duplicated it 12 times on an 8.5 x 11 sheet of paper and printed it on the LaserWriter for proofing. Once he had the desired layout and had it centered properly on the page, he used different colored cardboard stock manually fed through the LaserWriter. The result was excellent and all that remained was to cut the cards from the 8.5 x 11 cardboard. Textured cardboard with raised and depressed areas does not work well because the toner can not be bonded to the the depressed areas as it passes through the hot rollers. This results in the toner rubbing off. The various font styles available for the Macintosh can create quite professional results. It is possible to use all caps with the first letter of each word one point size smaller. This give the finished cards the more professional look found on commercially printed cards.

Another warning is to be careful when cutting up the cards. A paper cutter may be ok but you can often wind up with slightly different size cards unless you are very precise. I would recommend a razor blade type slide cutter found in most graphics shops.

Another advantage of doing your own business cards is the ability to prepare slightly different versions of the same card depending on your intended usage. This could include some with home and business telephone numbers or just a business number. Use a good grade stock of cardboard and you will be amazed at the results. I doubt that most people will know that you did them yourself!

Bits per Pixel?

Most computer users know that 8 bits of data equal 1 byte, but most don't understand how the number of bits per pixel (i.e., picture element or the small black squares in the fat bit mode of MacPaint or Full Paint) affects the color or gray scale capability of the Mac II.

The Mac II color video card comes with enough video RAM memory to support 1 bit per pixel for color or gray scale generation. That is, each pixel on the screen is controlled by only 1 bit of information. This amount of memory permits the simultaneous display of only 16 colors (also gray scales) on the color monitor. You may have read that the Mac II has a possible palette of almost 17 million colors but the number of bits per pixel determine how many of these 17 million colors can be displayed simultaneously. If you buy the extended video memory for the Apple video card your monitor can support 8 bits per pixel which translates into a possible display of 256 colors. Now, two manufacturers have released color video cards that support 24 bits/pixel for a theoretically possible 768,000 colors or gray scales out of the possible 17 million. This is accomplished by use of 8 bits for blue, 8 bits for red and 8 bits for green for a resolution of 1024 x 768 pixels which when multiplied equals 768,432 possible colors if each pixel were a different color. The 17 million figure of all possible colors derives from each pixel on the screen theoretically supporting 24 bits or 2^{24} power for 16,777,216 colors. Now I hope that was a clear as mud displayed in 16 x 10^6 colors!

You might say who cares, and you would probably be right for the average Mac user. After all if you can't print the 768,432 colors so what? Well, someone must care or they wouldn't be making these cards, right!?! What 24 bits per pixel gives besides an empty checking account is very true life color on a computer screen. "Now isn't that Special (thanks to the church lady)?"

The two companies offering such products are RasterOps of Cupertino, CA which has been shipping since September 1987 and SuperMac Technology that has only announced a 24-bit color video card.

The Fear of Flying - Icons

I for one am hooked on "icons" and I can't stand plain old "text" on my Macintosh screen. If I wanted text for a directory or desktop I would have kept my Apple II or bought an IBM PC (did I really say that?). At least the Macintosh gives me a choice, but when one of my coworkers has a "text" display and I try to find a file, I find it noticeably slower trying to wade through line after line of "text." After all isn't "a picture worth a thousand words?" Pictorial displays have an instant meaning and user recognition factor, while I actually have to think (forbid) while sorting through a listing of "text." Most Mac users can tell MacWrite, Excel, Word, or MacPaint icons apart even if no names are attached. After all, didn't the ancient civilizations use icons to adorn the walls of caves so that later civilizations would have an easier time figuring out how they lived?

New Macintosh users may be better off initially using the "text" display option until they acquaint themselves with the distinctive icons of the various Macintosh programs. Each program has its own icons and most have multiple icons that even tell the user if it is an ASCII (text) file or a binary file. Try it both ways and I think you will eventually reach the same conclusion that icons are easier to recognize than plain old "text." Thanks for listening, I feel better now!

OCR-A Font

A lot of the routine message traffic in the U.S. military uses the OCR-A or B font and DD Form 173 for its preparation. The message is typed on the form and then read by OCR readers for transmittal. LCDR Doug Bloomquist, CEC, U.S. Navy has duplicated the standard OCR-A font for use with the Macintosh. He has a bit-mapped version for installation in the system and a PostScript version that is placed in the system folder. He says

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that when you print a document using the font, the Mac will automatically download the PostScript version to the LaserWriter, print the document, and clear the PostScript version from the LaserWriter's memory. LCDR Bloomquist used an IBM Selectric OCR typing ball to print out the font and then digitized the result. He then used Fontographer to track the digitized version for creation of the Mac OCR-A font. The end result required some tweaking and trial reads until he got it right. He made use of WriteNow by T/Maker Graphics, but Microsoft Word version 3.01 supporting "fractional pixel widths" on the LaserWriter also appears to work. You must use LaserWriter drivers 4.0 or greater which allows printing within 1/2" of the edge of the form. I took his sample message from WriteNow, copied the text to the clipboard and pasted it into Microsoft Word. I then changed the top and left margins slightly to get a proper print out on the LaserWriter using the manual feed option. After several tries, the laser output was properly spaced on the DD Form 173. It may also be possible to use 8.5 x 11" plain bond paper if your message center permit its use.

The true test was to see if it could be read. On this count I failed, but the problem was the old type of OCR reader I had available. I am told that a new OCR reader will be in place in about one year and this should correct the problem. LCDR Bloomquist says he has tested this font on five different Optical Character Readers the Navy uses and it worked fine. My thanks to Bill Brucato for bringing this font to my attention and to LCDR Bloomquist for adapting it to the Macintosh. The font will be available on a WAP Mac public domain disk.

Betaware Goes on Sale!

First Ann Arbor Softworks and then Word Perfect initiated a new trend in software called "betaware." This is actually selling "beta" versions of unfinished software. Don't get me wrong—they are not charging the finished price but they are selling unfinished software. Both companies have been hit by much criticism for their respective "vaporware" products, Full Write Professional and Word Perfect for the Mac. Ann Arbor gave away a reported 10,000 copies of its beta version Full Write Professional at the Mac World Expo in San Francisco and also sent to presold customers the same program. I got a copy in the mail and it has much potential but the thesaurus and spelling portions of the program are not functional in the beta version. Word Perfect sold beta versions for $99 with the promise that when it is finished, purchasers will get the finished version for no additional cost.

Now that Ann Arbor has been purchased by Ashton-Tate it remains to be seen who will fulfil the promised delivery of Full Write when it is finally finished. Ann Arbor will be merged into Ashton-Tate's Macintosh Software Division.

MacUser stated that this trend of selling betaware had to stop, but I see it differently. True it isn't the best idea, but I think it ultimately benefits the consumer. Some say that beta testers get the program free when it is finished and the company is using the consumer as a beta tester. First, a real beta tester is expected to report to the company any problems they discover, while the betaware purchaser is under no obligation to do so. My experience is that they are already aware of problems by the time the average user calls to report problems. Second, you are able to purchase a program that retails for $400 for $100 which is an estimated savings of about $100 to $150 over what mail order houses will sell a $400 program for wholesale. Finally, you will not have to pay any more money for the final 1.0 version, and most betaware sellers are also promising (?) a free upgrade when that is released. I really don't see how the computer consumer can go wrong unless the company goes bankrupt before you get version 1.0. In the case of Word Perfect, Inc. and Ashton-Tate, that isn't going to happen.

Claris Upgrades!

Claris has set up a toll free telephone number for owners of Apple Computer software to obtain upgrade information. Owners of MacWrite, MacDraw, MacProject and MacPaint may call 1-800-544-8554 to receive an upgrade package form. You will be required to return the form, the original disk, and pay the upgrade fee (i.e., MacWrite $25, MacDraw $100, MacProject $145 and MacPaint $25) along with shipping and perhaps tax (California residents only?). Do not send your original disk to Claris without getting the form and mailing envelope. They are accepting upgrade orders for all packages but as of March 1988 they were not shipping MacDraw II. There is a MacDraw version 1.9.6 available but I doubt it is worth getting compared to version II.

Lynn R. Trusal may be reached at 301-845-2651 for additional information or questions about information that appears in this column.

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MACINATIONS 3

by Robb Wolov

The Blueing of Apple

I hate cliches but, revenge *IS* sweet! I was thumbing through the computer trade press the other day, when a news item caught my eye. It brought to mind a television commercial a while back, where a series of car salesmen were proffering their wares as, "Just like a Such-and-so." Obviously it was not that great a commercial since I can't remember the car. Except, this time it was not about cars, it was about computer operating systems. It was not about BMW's or Mercedes or Subarus, but about OS/2 and MultiFinder. And, it was IBM that was "just like a Mac."

There he was, Michael Maples, IBM's director of software strategy, addressing a convention of information center managers the week of January 18th, claiming that OS/2 will give PS/2 applications the same consistent interface of the Mac. "Hardware and software inconsistencies which occur under a 'shallow' operating system such as DOS will disappear under OS/2".... The Mac is evidence to support this theory." It was Apple that was setting the standard to meet. IBM was trying to sell PS/2's as being as good as a Mac!

This prompted me to consider what Apple has become today as a corporate entity and a market force. It's partially because of the politics of the marketplace which determines what products, we as consumers, will see—and which ones we won't.

Two years ago Apple commanded less than ten percent of the corporate small computer market. Today it commands fifteen percent with sights on twenty. As charming as the David versus Goliath analogy may sound, Apple ain't no David anymore! Steve and Woz's garage will take its place in Apple's corporate museum just as Old Man Watson's hand-cranked adding machines do in IBM's.

But, with size come problems. Apple has had slow steady corporate growth. It is not as big as IBM and probably never will be (nothing, but nothing is as big as IBM, whose finances rival most third world countries and give some intermediate sized governments a run for it). They do not call it Big Blue for nothing!

Where IBM has used its sheer marketing mass to establish standards in the computer world in just about every size or category of computer you choose, Apple has fought back with innovative technology. These differences in strategy and marketing approach may be a hint of possible future problems as Apple grows. With mass comes momentum. The fact that most of the small computer world is using MS(PC)-DOS on Intel chip based machines attests to that fact. But, with mass also comes inertia. It is against inertia that Apple must be ever vigilant.

There are indeed economies of scale. As you get bigger, there are more resources for research, development and perhaps funding for highly specialized products with limited marketing scope. IBM's R&D division rivals Bell Labs, that organization that Jerry Pournelle likes to refer to as "the R&D lab for the human race". They have indeed been eminently successful; their most recent development being high temperature super-conductors.

But, IBM has been playing it safe. Their research has not been coupled with the degree of innovation required to market truly advanced products. This is the corporate inertia mentioned.

In a recent article by the editorial staff of *Government Computer News* on competitiveness in world markets, IBM was specifically criticized for doing excellent R&D but failing to live up to expectations for innovative, marketable and truly competitive products. By playing it safe and conservative, IBM has been losing market share to the innovators. Apple must not let this happen. Hopefully this will remain just a warning and not a fulfilled prediction.

The Greening of the PLP

Since we last took a look, the QuickDraw laser printer war has heated up. With ever more powerful—and expensive—top of the line laser printers designed for corporate DTP applications, attention has turned to low end, non-PostScript printers intended for individual users. Apple has finally pulled the wraps off of their new LaserWriter II line, including the QuickDraw based entry level SC model (previously code named "Solo"). The two initial combatants, General Computer Corporation (GCC) with their Personal Laserprinter (PLP) and Apple should be joined by this time by Taxan's entry, a liquid crystal shuttered laser printer.

While Apple, just by being Apple, has legitimatized this market, the first round I feel goes to the PLP. General Computer has dropped the price of their product to two thousand dollars, fully eight hundred less than Apple's SC. As we all know, Apple's discounting policy is nothing to write home about, while deeply discounted street prices for the PLP only accentuate this difference (I've seen PLPs for sixteen hundred dollars).

GCC seems to be lavishing more attention to the PLP, making it the center of a system. In spite of the fact that Apple's corporate differences with Adobe prompt it to make QuickDraw a viable competitor to PostScript, their attention still seems directed to their more expensive, PostScript based LaserWriters. GCC has made all the typefaces of the old LaserWriter Plus (or the new LaserWriter II NT), plus a few more, available as outline fonts. Like PostScript fonts, these are manipulatable without distortions. Apple, for the time being at least, has limited the SC to smoothed, bit mapped fonts. They do not look bad—just not as smooth as the competition.

The one major criticism of the PLP has been its speed. Since it uses the Mac to control page setup and drawing, with complex page designs on 68000 based Macs, many users found it, well—slow. GCC has been aware of this criticism, and has addressed it in the form of an entirely new software package which essentially doubles the speed. General Computer has attacked the speed problem on three counts. First, it tightened up code. Version 2.0 of the Print Manager and driver is simply more efficient. Second, the driven speed of the Ricoh engine was increased. The printer's internals are rated for 6 pages per minute (ppm) but were previously being driven by software at only 5 ppm. Finally, the printer's typefaces have been appended with "pre-built" fonts. The majority of fonts have been essentially "pre-drawn" in code rather than by the computer. These fonts

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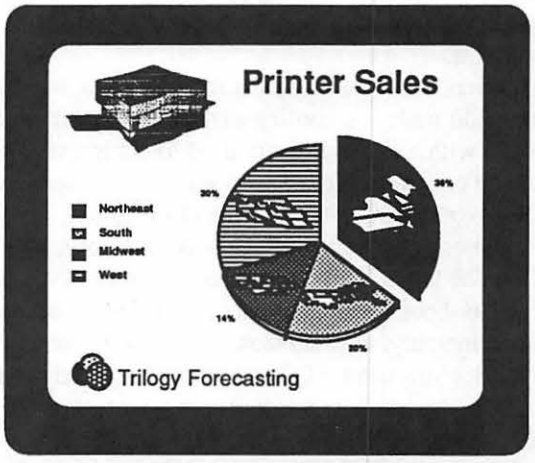
have been optimized at 9,10,12,14,18,24 points. Of course, sizes in between and outside of this range are mathematically constructed by the computer as before. Additional, functional improvements have been incorporated in the form of variable kerning control and multiple draft mode resolutions.

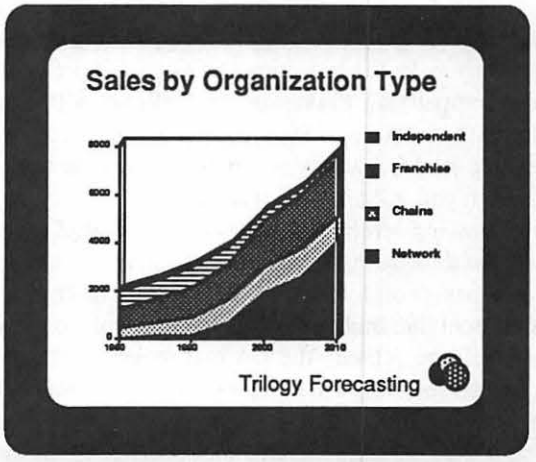
The effect of these changes is a doubling in speed and thus a profound change in the character of the printer. Bench marks run using a test page composed of four typefaces (three more than artistic taste would dictate), required nearly thirty-five seconds with the old software. The new software required only fifteen seconds, a 43% improvement. A more typical page of a single typeface, required only seven seconds versus the previous fifteen seconds (47% improvement). Admittedly these tests were run on a Mac II with two megs of RAM, not a typical setup, but the relative differences in speed should hold, since such factors as the faster print engine speed and the use of pre-built fonts are now computer independent.

Apple, with their ImageWriter LQ and LaserWriter II SC has legitimatized the QuickDraw printer market. Software vendors are now releasing upgrades where necessary (if you followed the rules in the first place there were no problems) to make their wares LQ, SC and PLP compatible. MyDiskLabeler (2.6.3 LC), which was optimized around the old LaserWriters and thus requires both mechanical and software compatibility, had no difficulty with the PLP. However, a formal Mac II/PLP maintenance upgrade (2.7) should be out by now. Microsoft has released Word 3.02 to compensate for margin and page formatting errors inherent to PostScript but not present in QuickDraw (PostScript printers shift text slightly to the right, QuickDraw printers center properly).

An upgrade board for converting the PLP to a full PostScript printer should be available by this reading, but with more powerful QuickDraw software becoming available, there may be fewer reasons to consider this option. These can be installed by the dealer or through one of Xerox's service centers. The new software packages (5 disks plus manual addendum) can be obtained through either dealers locally or by telephone through Precision Images (800-356-6592).

GCC has thus far demonstrated their commitment to the product, with the rest of the industry getting behind the PLP and QuickDraw printers in general. The PLP was good before, it has only gotten better.





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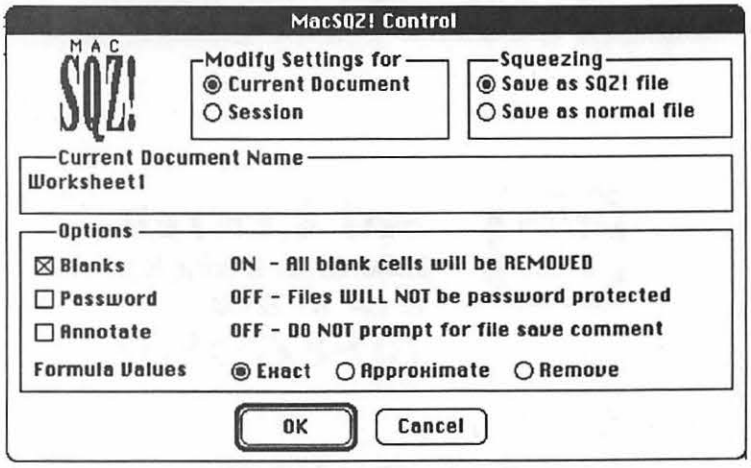
While there aren't many utility programs for Excel users, one worth considering is MacSQZ! published by Symantec. If you keep a lot of data stored in spreadsheets that are now overflowing your diskettes or hard disk, SQZ may be able to free up substantial space for you. As a companion to a number-crunching program, it has one basic function, to scrunch Excel data files. In my experience, it can compress Excel spreadsheet files to one fifth their size.

SQZ offers additional features including password protection, and audit trails. According to the documentation, SQZ is compatible with a sister program used to compress Lotus 123 files, so you can exchange compressed files between Excel and 123. However, I have not tested this last feature.

SQZ comes as three programs, a desk accessory, a utility and an INIT. The latter is a file you place in your system folder. When you re-boot, INITs in your system folder are read and loaded into memory. A small icon appears on the screen during boot-up to let you know SQZ is in place and ready to crunch away. The desk accessory is installed in your system file as any other DA using the Font/DA mover program. It can also reside in a desk accessories file if you use Suitcase or the Font DA Juggler. Also, Symantec includes scripts for use with Apple's File Exchange program for doing batch squeezing or unsqueezing. This can make the transition to using SQZ pretty simple.

The accompanying 75 page manual tells you all you need to know to get the most out of SQZ, though it is in fact quite simple to use. Once set, SQZ works automatically with the options you choose when you initialize the program.

The following screen shot shows you the SQZ menu activated by the desk accessory. With the DA, you can turn the compression on or off for the session or for the current document. Standard Excel files built with SQZ inactive will remain uncompressed until you activate the DA and request a compression. Once compressed, files will remain in the SQZ format whenever they are modified.



Other options set with the DA are the elimination of blank cells, and the setting of password protection or annotation modes. While Excel offers a form of password protection, it merely prevents someone from modifying the sheet or examining the formulas in the file. SQZ's protection mode is a bit stronger—it prevents the file from being opened! The annotation mode offers a dialog box every time the file is saved. A fifty character comment can be added in this box. The comment will be time and date stamped for later retrieval. One limitation which reduces the usefulness of the date stamping—these comments can only be accessed with the accompanying Tools program.

The last line of the menu allows you to set a degree of file compression based upon the results of formulas in your sheet. Selecting the Exact option stores the formulas and the resulting values to full precision (about 15 digits). Selecting approximate stores the formulas with the resulting values stored to half precision (about 6 digits). Full precision is restored when the sheet is opened and Excel recalculates the formula values. The greatest compression is obtained by selecting the remove option when no values are stored with your sheet, only the formulas. Again, when the sheet is loaded and Excel performs a recalculation, the full precision of all values will appear.

To assist you in recognition, SQZ files have an exclamation point appended to the end of their name. Also, a SQZ'ed file icon is a half-sized version of the standard Excel icon. A minor annoyance, SQZ is not fully MultiFinder friendly yet. When you try to access it with Excel loaded in MultiFinder, you will get a message suggesting that SQZ is only available during an Excel session. Note that the DA Handler icon is appearing in the upper righthand corner. To avoid this situation (for other DA's with similar problems) hold down the Option key when you load the DA. You should see Excel's icon remain in the upper righthand corner. SQZ will now load "in" the application rather than the DA Handler. With Suitcase, you must hold down the Option key when you select Suitcase and again when you select SQZ.

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MacNovice contd from pg 49

There are some features which FullWrite does not offer. Scriptwriters (either TV or theater) will not find the ability to format side-by-side, *synchronous* columns on a page. And desktop publishers cannot yet completely substitute FullWrite for their page layout program because FullWrite cannot link text blocks on different pages to allow articles to be "continued" on another page. Perhaps these advanced and specialized features are under development by the publishers for a future release of FullWrite, but the initial versions are not likely to include them.

For MacNovices, the bottom line is: FullWrite is a powerful and advanced word processor. You will *want* to learn it because it can make your Macintosh word processing look truly professional. It can integrate your text and pictures in the perfect way. But it's not going to be easy to get started.

For advanced Macintosh users, FullWrite is a must. It will truly change the way your documents look. It brings desktop publishing and word processing into a single program for the first time.

If Ashton-Tate ever releases FullWrite Professional in a final, bug-free (or at least bug-freer) form, I strongly recommend it.

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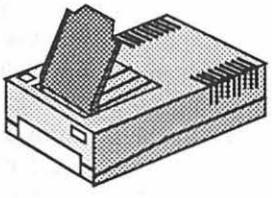

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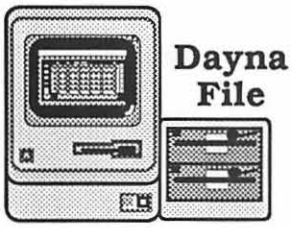

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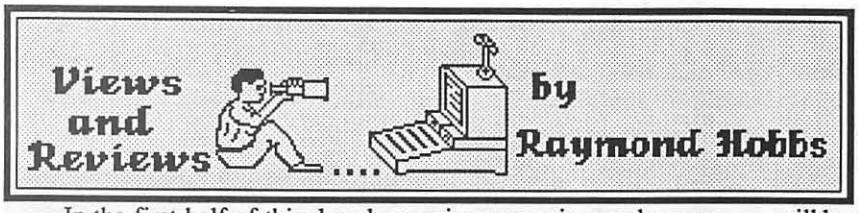


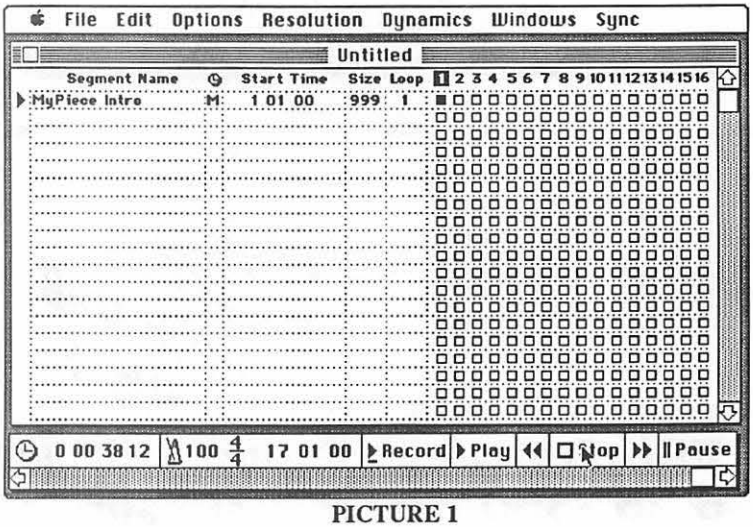
In the first half of this decade, music sequencing packages generally offered only a small list of features, and usually delivered what they promised. Lately, however, the software has gotten so powerful and full of features that simply describing all of its functions requires a great deal of writing, learning to use it requires a great deal of time, and purchasing it requires a great deal of money. Here are the two premier high-end music sequencers for the Macintosh and MIDI synthesizers.

MIDIPAINT (Southworth Music Systems).

Happily, MidiPaint has resolved two of the three problems mentioned above. Priced at $150, it is one of the least expensive MIDI sequencers available for the Mac, and if you are familiar with any of the "Paint" programs for the Mac, learning it is largely intuitive—it acts like you think it should act. Unfortunately, it still requires a good deal of writing to describe all of the things that MidiPaint is ready to deliver. This baby is full of features.

The package is performer-oriented. It's at its best if you play in the music and then use MidiPaint's powerful editing features to "fine tune" your composition. In order to understand the way that MidiPaint works, you should think of songs as a collection of segments, which are really sequences. Segments can start at any given point in the song, may be of any given length (not even restricted to measure boundaries), and may loop (repeat) any number of times. The segments are further broken down into tracks. Using this type of hierarchy, segments may easily be gathered together to produce a song. Moreover, segments are saved as separate files, so that the same segment may be used in numerous songs.

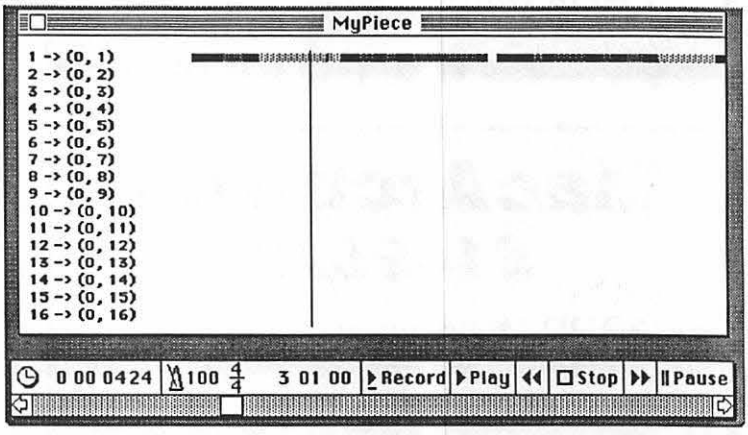
Undoubtedly, the best way to understand MidiPaint is to use it. When first opened, the screen contains the Segment List Window, which defines the overall structure of the song.



PICTURE 1

The user will use the Segment List Window to open segments (new segments are created simply by clicking on a blank Segment Name line), specify the measure, beat and click that the segment will start on, and the number of times that the segment will be played. Of course, the segment size will be calculated as you play in the music. The numbers 1-16 at right indicate the track assignment for that segment. A black box indicates that the track is record-enabled, while a gray box indicates that it is play-enabled. An empty box denotes no usage of that track for the segment. Note that it is not necessary to define all the segments up front. You may return to the Segment List Window at any time to update, add or alter song parameters.

After enabling a track for recording (actually, MidiPaint allows up to 4 MIDI instruments to be recorded simultaneously across multiple segments, but let's keep it simple for now) the user clicks on the record button and plays in the music. When the recording is done, the stop button is clicked and MidiPaint calculates the segment size. The user may see what has been recorded by selecting the Track Usage Window from the Windows menu.



PICTURE 2

The Track Usage Window shows the recorded music for each track on the selected segment as a horizontal bar of varying patterns. The shape of the pattern is unimportant, but the relative darkness of the pattern indicates the velocity information which came in along with the notes (eat your hearts out, CZ-101 users!). A vertical line runs through the segment, indicating the current position enabled for editing in the segment. The user may move this line with the mouse. Then, selecting the Note Editing Window from the Windows menu will put the user into MidiPaint's unique music editor.

Anyone familiar with MacPaint or any generic "Paint" program can quickly learn to use MidiPaint's editor. The tools displayed at the right are, for the most part, the same ones used in MacPaint, and they act the same way. The marquee is used for selecting areas, the hand moves the music "page" (more accurate than the scroll bars), the eraser erases, the paint brushes (large and small) paint notes(!). New tools include a pair of pliers for moving, copying or stretching notes, a question mark for displaying raw midi data for editing, a microscope and a telescope for zooming in and out, a trumpet for patch editing, and controller and pitch bend tools for editing that type of information also.

The keyboard (vertically, just to the right of the tools) has a

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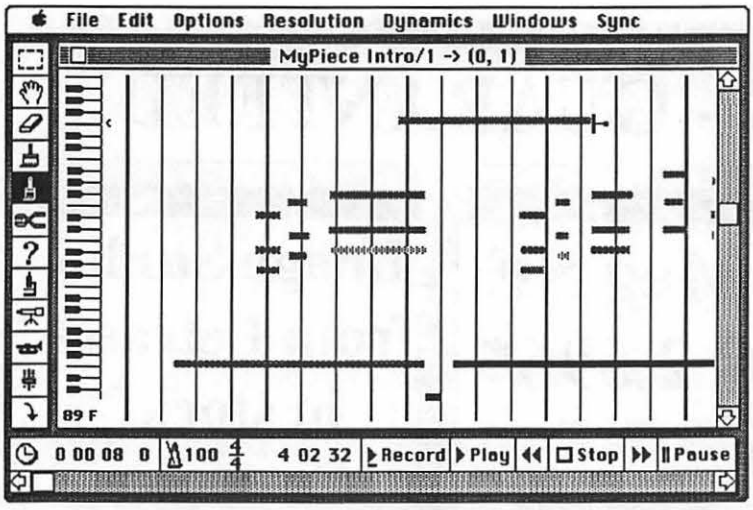
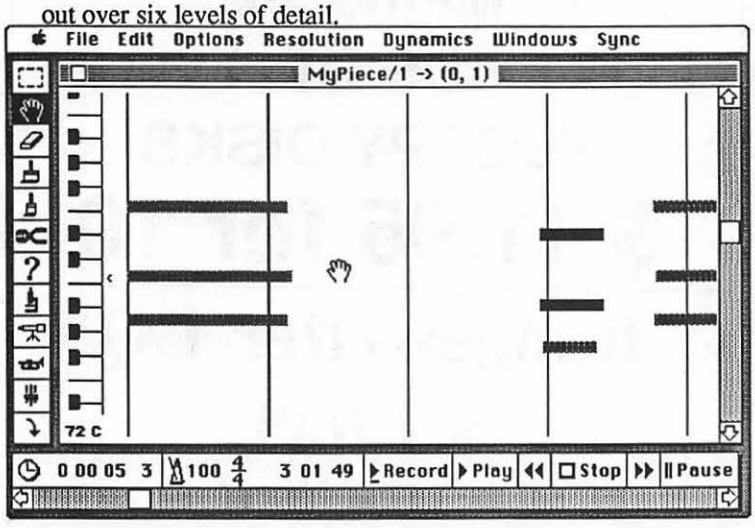


PICTURE 3

pointer which always indicates the note at the current mouse position. This information is duplicated below in symbols indicating note number and pitch. The music itself looks something like a piano roll stretched out horizontally. Moving around is easy (and, gasp! fun). Zooming in allows great precision in editing musical events, and the user may zoom in and out over six levels of detail.



PICTURE 4

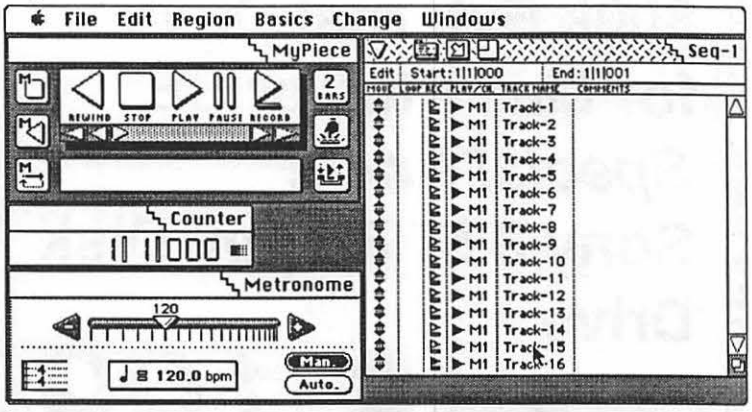
MidiPaint also uses a number of menus to accomplish regional and global editing. These operations include everything you would expect in a high-end sequencer—Quantize, Transpose, Slide, Bounce, Accent, Dynamics and MIDI filtering, as well as sound-on-sound, punch-in and punch-out, and step recording. Oddly absent was an audible metronome click, which makes that first recording a real bear. My workaround consists of painting in a rhythm track which accents beat 1 and loops 100 times. The other missing feature is score printing, but to tell the truth, I didn't expect to see it at the low price tag on MidiPaint.

If you are using a Jambox MIDI interface (which I do, since I think that it's the best around, period), MidiPaint will allow up to 16 channels of MIDI information to be sent to each MIDI cable. With my Jambox 4+, this results in a mind-boggling 64 channels of MIDI power—enough to support 8 synthesizers in multi mode! MidiPaint will also do 100% of its functions in SMPTE, for those of you with video work to sync to.

In summary, MidiPaint packs a whole lot of power into an easy-to-learn, easy-to-use, and pocketbook-friendly package. Thanks, Mr. Southworth.

PERFORMER (Mark Of The Unicorn).

Performer is the perfect embodiment of the three features mentioned at the start of this article. It is loaded with features, requires a significant amount of time to learn and costs a bundle. Performer's real and step-time recording features are not much different than those of any sequencer—you play, it records (continuous in real time or one beat or fraction in step time). Recorded sound tracks may be routed over up to sixteen MIDI channels (most synthesizers use a minimum of one and a maximum of eight channels). The basic Performer screen consists of a menu bar for various functions plus four windows: The Controls window, with scroll bars and buttons simulating a tape recorder's functions; the Tracks window, with point-and-click operations on recorded tracks; the Metronome window, with buttons and bars for meter and tempo operations; and the Counter window, with information and pointer placement on the current position the pointer is in the current sequence. This basic screen is a little cluttered, but functional (after a "getting-used-to" period).



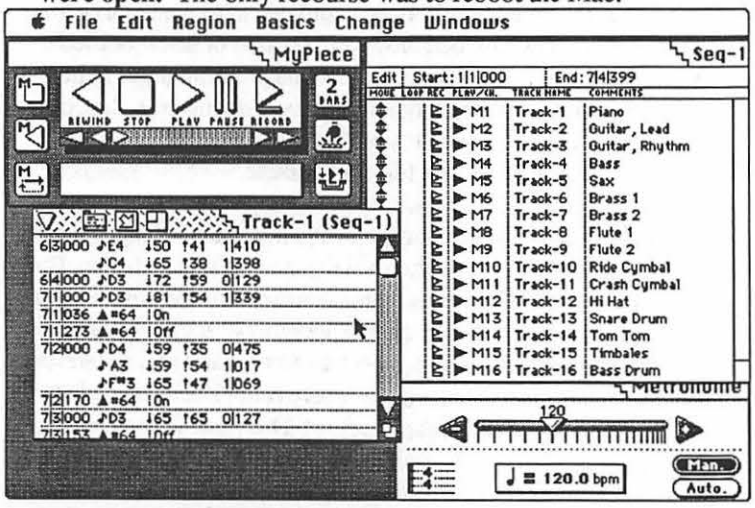
PICTURE 5

The Counter and Metronome windows keep track of the song's tempo settings and your current location in the composition. The Tracks window is used to set the overall parameters for the sequence being recorded. The convenient arrows at the left allow the user to move the parts up and down in the window. Next to the Move arrows is the loop indicator, which merely indicates whether or not there are any loops on that track. Roughly in the middle of the window are the Record-enable and Play-enable buttons, along with their respective Channel Assignments. It is very helpful for silencing one or more tracks while critically listening to the rest. The Track Name defaults to the lame "Track x", but may be changed by the user, and the optional Comments field is useful for putting in notes on patch assignments and so forth. Each window in Performer has its own "Mini-menu", which contains options pertinent to that window's function.

Where Performer's professional capabilities come out, however, is in its editing capabilities. Any MIDI data transmitted between synthesizer and the computer can be manipulated in some way by Performer's editor. Global operations include meter setting, clicking and/or flashing metronome, bouncing tracks, sound-on-sound and MIDI sync functions. Regional

contd.

operations require a section of MIDI data to be selected by highlighting it with the mouse. This is accomplished by selecting a track to operate on (from the Tracks window) and opening it, which produces an Edit window for that track. Theoretically, any number of Edit windows may be onscreen at any time, but a practical minimum, due to screen constraints, is about four. **My system sometimes hung up if more than four edit windows were open.** The only recourse was to reboot the Mac.



PICTURE 6

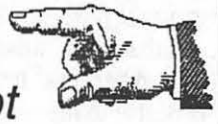
The Edit window uses the track name as its title. The default data displayed in the Edit window (from left to right) is Location (measure-beat-tick), Event Type (note, controller, patch change, etc.), Value (note and octave for note on events, patch number or controller number), then either controller value if the event was a controller event, or note on velocity followed by note off velocity and duration.

To conserve space, the windows are re-sizeable, and may be configured to display only the data you wish. Thus, for example, you may opt to not display note velocities for tracks recorded for a Casio CZ-1000, which does not respond to velocity information (when recording, such information may be filtered out—handy if your MIDI data is becoming a bit crowded). All MIDI data is displayed in its raw form, so if you use Performer you must be (or become) familiar with it. Most MIDI data can be edited by typing in a new value or striking a key on the synthesizer. Cut and paste within a track, between tracks and between sequences is supported. However, in lieu of pasting one section of music over another, musical data may be spliced in at a particular point, or it may be merged in (the former is like cutting and splicing an audio tape, while the latter is like sound-with-sound recording). Selected regions may be transposed, dynamically altered, or quantized ("rounded off" to the nearest indicated note value). Note durations may be altered and dynamic changes may be smoothed, as well. Punch-in/punch-out operations can be enabled between indicated range boundaries.

Despite this awesome array of capabilities, Performer has some shortcomings. First, there is no music notation available in the program, although Performer files can be read and converted to music notation by the companion package Professional Composer. However, at $495 apiece, Performer and Professional Composer cost more than a lot of complete MIDI systems! Other sequencers offer a broader range of functions for less. Second, I don't have a lot of faith in Mark Of The Unicorn's commitment to consumer support—at least, not to the run-of-the-mill consumer. Mark Of The Unicorn told me that they produce "high-end music software for the professional musician", and that "casual users such as those in users' groups represent an *insignificant* market" to the company. This was further borne out by the fact that my Performer upgrade (another C-note), although promised in two weeks, was in fact over five weeks in arriving.

To sum up, Performer is a high-powered sequencer with a high-powered price tag. Functionally, it is neither harder nor easier to use than other high-end sequencers to any large degree. There is no music notation editor included. Virtually all MIDI data can be edited by Performer. And I question the desire of the publisher to support our "insignificant market". If you already have Performer 1.x, I suggest that you pass up the upgrade to version 2—the added features are 90% cosmetic and 10% functional.

TAKE A LOOK!



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FINDINGS
by Larry Feldman

DiskTop: It Really Does Get 5 of Whatever You Use To Rate Things. In case you missed it, DiskTop is the latest in the line of all purpose, must have Mac utilities that periodicaly arrive with a big splash. It was born a star: a big deal arrival with a name developer and full page color ads in the national mags followed rapidly by five star reviews and celebrity endorsements. I was prepared to loath it.

One thing that initially put me off about DiskTop is the persistent difficulty I had in forming a clear mental image of what it does. After reading a fair number of articles about it, I knew that everyone who had the program considered it essential. What precisely they did with it was less clear. Software that falls into the 'you had to be there' category is usually for people who are more technically proficient than I am. In the end, I tried it out because I was looking for a DA that did the find-file thing on my hard disk better than Find File which I got free from Apple; and much of what I read about DiskTop boiled down to that in addition to being a "portable finder" (whatever that is) it was one hell of a file finder. It is.

It is also able to perform quite a remarkably long list of other useful but sometimes only loosely connected functions. Indeed, the package has so many faculties that trying to encompass them all in an over-arching description risks generating a kind of intellectual smoke. Phrases like 'extraordinary multipurpose software tool' sort of ooze through the cracks in your consciousness. My own sense of how to communicate what manner of beast we have here is with a capsule version of what it does best and that I like most. Recognizing that other people might well offer other lists, here are the four powers of DiskTop that most endear it to me:

1. It finds files by almost any sort of weird criteria imaginable and it does it lickity split;
2. It opens documents and runs programs from inside other programs;
3. It gives you a bunch of Finder functions in desk accessory form;
4. It provides a graphical display of your files so that you can SEE what you have where.

Finding Files—First of all, it DOES find files. It finds files very, very rapidly which counts for something if you have 20 megabytes of only loosely organized documents scattered around a hard disk. Indeed, if you are, like me as a matter of temperment, prone to put the magazine you are reading now on top of the book you were reading a few hours ago, both of which quickly acquire a fine patina of file folders. If that is you (too), a hard disk is unthinkable without a software solution to the query, "I wonder where it is?" Apple's Find File is allright, but DiskTop is special.

Not only does it do its work quickly but it gives you the option of searching by just about any of the ways computer documents are categorized. I had always searched for documents by their name (or whatever I could recall of their name) and thought that in reality that was just about it. Everything else was window dressing. I thought. Then came the occasion when I NEEDED to compile a list of all the files on my hard drive created by my outliner. DiskTop compiled the list for me in under 60 seconds. I Love It. Then in rapid order came other occasions when it ranged from somewhere between convenient to essential to find things according to when they were created or last modified or something else. It turns out that as you work in larger number of applications, creating larger numbers of documents, the occasions requiring a sophisticated file search capacity multiply. DiskTop pays its rent as a file finder alone.

Launching—The ultimately neat thing about its capacity to Find is that once it has found it can Open. OPEN. Not just move to the desktop where you then have to go yourself and open. But launch and run. Right there from wherever you are. Hit the Open button or double click on the file icon depending on the exact circumstances. DiskTop politely closes whatever you are in, saving everything appropriately every time, I'm sure, and then Opens the new document/application. This is the way computers are supposed to work, doing what needs doing without an excessive amount of instruction.

Follow it operationally for a moment. I am working in MacWrite and by dint of typically poor planning I need to consult the source documents which are, of course, in Excel. DiskTop eliminates most (not all, but most counts for a lot) of the tedium of Save/Quit/Open/Open/Open/Close/Close/ Close/Open. It turns out that the trip to and from the desk top burns up a lot of time. My own sensibilities and working habits are such that this feature all by itself makes DiskTop a must have.

Finder Stuff in DA Form—Originally I thought being able to get at Finder functions from within an application merited filing under What's All The Shouting About. I take it back. Being able to do stop momentarily and take care of basic file housekeeping from within an application program turns out to be, frequently, one of those prosaic conveniences that are genuinely convenient. I am talking about such things as moving documents around —out of one folder and into another (newly created one) and then trashing some of the remaining stuff. File management. Having tasted it, you would not want to give it up. What it does, in sum, is let you do **right now**, what otherwise you would ordinarily have to wait until you got back to the desktop to do and therefore will often never get around to doing.

An example: It's an open secret that the Mac is always misplacing stuff. I mean, I don't do it. Recently, I went looking for a document and needless to say, it wasn't in any of the places that it ought to be. So, I did a DiskTop search. And I found it. In my System Folder. (Which proves my point—that's about the last place I would put it.) So, now I can use DiskTop to MOVE it to the folder where it belongs. Out of sight—literally. I neither had to go back to the Finder nor make a note to fetch the document later when I was in the Finder. I just moved it. Not earth shaking, but nice.

File Display—Of all its many (many) features, DiskTop's 'file display' function is arguably its most significant contribution to the Macintosh Way. This is odd in view of the fact that it attacks a problem that has received little attention with a

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solution that has earned next to no recognition. Indeed, the developers apparently did not intend that what I am calling file display be viewed as a recognizable feature or collection of related features at all. This function of the program is nowhere mentioned as such, either in its ads or documentation. Rather its manner and method of file display are treated as the context in which you perform the program's (other) functions. Nonetheless, I'll stand by the observation. Intended or not, among DiskTop's most valuable and powerful features is the way it displays the material stored on your disk and expedites rapid access to information about it.

Consider how excruciatingly difficult it often is to visualize what you have and where, to get an overview of your folder structure, to wrap your mind around what documents are stored with which applications. For lack of a better term, call it the file display problem. HFS lets you create filing complexities on the order of Chinese puzzles, but does not realy provide the tools needed to navigate efficiently in and around multiple levels and endless folders.

The main device that is employed is that awful, anti-intuitive "list box" (or whatever its genuine name is) that Open, Save As and other commands summon up to show you the files at any given HFS level. In addition to suffering from all the inherent inadequacies of lists, it does not even make very good ones. That is, it does not list enough of the right things. It cannot show you the applications in a folder or documents other than the ones created by the program you are in—one or the other of which, of course, being what you usually need to know.

Enter DiskTop with a creative and very Macish solution: graphical file display. The program opens to a Files Window which, like a list box, is a display of what you have at any given level of the HFS, but nicer. So much more graphical. From there you can mouse around allowing the eye and hence the mind to take in everything on your disk—but faster, more completely and much more clearly than any text listing could be. Moving from one HFS level to another loses its lingering ambiguity. Everything in a folder becomes visible for inspection with a (single) double click. Now you are equipped to navigate around your hard disk and SEE what's there.

You will also note that DiskTop makes every file stand up and clearly declare the computer version of name, rank, and serial number: what's it called; where's it located; what's it (folder, document or application); how big; when last modified; more if you want from its own Get Info system. And, of course it does all of this as a DA from within an application without going back to the Finder, which accounts for much of its charm.

Please understand that I've only skimmed the surface of this software package. For the record, I have not even gotten around to the parts of the package that pleased me less. There are many areas where a good idea has been implemented awkwardly. Inevitably it is just there that the manual lapses into gibberish. Also DiskTop does lots of things other than those covered here and there are 2 small bonus programs, Laserstatus and Widgets, that accompany the main application which also do lots of things. It's all in the reviews which in turn are all over the place.

Version alert—It may actually matter to you. As with most things having to do with computers, this depends. The most recent DiskTop version, as of this writing, is 3.0.3 which makes it fully MultiFinder compatible. That does NOT mean that it has acquired some magical multi-tasking properties. It means that when you perform a Find, for example, in DiskTop and MultiFinder is running, your System will no longer blow up. Version .3 also fixes some miscellaneous incompatiblites with other popular Mac utilities.

Commercials for small items that make computing more fun and for some reason or other have not gotten the celebrity they deserve:

Drop Down Menus

Oddly, most people seem unaware of it, but drop down menus are an optional feature of the Mac interface. Running this teenie utiltiy called EZ Menues acccomplishes just what the name implies. It makes your menus drop down, seemingly of their own accord. You position the cursor in the menu bar over the name of the menu you want to drop down and it does. When you move the cursor, the menu rolls up.

The controls let you set the number of seconds that they stay dropped down and a command key combination that allows you turn them off if they become inconvenient. Everything you need.

Drop down menus are at least as important a contribution to the Mac interface as the tear off menus in HyperCard. One man's opinion. But I'll tell you, I can live pretty easily without being able to waltz my menus all over the screen. Something I feel moved to do once in a while—a long while. I would not, however, like to return to the primitive early folk custom of having to drag them down and HOLD. Not after getting used to being able to mouse up to the menu bar and have them drop (down) effortlessly. Everytime. Something I feel moved to do every few minutes.

Why they have remained a sort of a semi-secret is a genuine mystery. To the best of my knowledge they are not plagued by the incompatibiltity problems that all too often accompany avant garde improvements to the System. As far as I can tell they work fine and allow everything else to work the way it's going to, fine or otherwise. I got turned on to them by an oblique allusion somewhere in the middle of an article that was going on endlessly about something else. That's basically the only reference in print that I've ever seen.

The puzzle of their anonymity aside, menus that drop down on their own initiative and stay there on their own energy are a joy forever and should at least be tried by everybody.

The Crash Saver

G 40F6D8. Copy it. Pin it up somewhere close to your Mac. Where you will find it when you want it—which is when you bomb your system, not having saved for a while.

You may well have seen this mentioned before. Like right here in the Journal. But not with anywhere near the reverence it deserves for its ability to save you big chunks of time by not having to do your work **OVER AGAIN.** It doesn't always work, but it doesn't have to in order to earn its keep.

If all this sounds intriguing but you dont know what I'm talking about, it's as follows: there is this technique for getting a chance to Save when you bomb (sometimes). You must have the programmer's switch installed. (If you don't and you don't know about programmer's switches, that's a different subject. Get on the phone and find someone who can tell you. They are all over the place.) So, when a bomb arrives, DO NOT reset. Hit

contd.

the rear portion of the switch(whatever it's called) instead. A box with a > prompt appears. Type G 40F6D8, hit Return, and Hope. With luck another box appears asking you in Mac politese if you want to Save. (Note that there is a space between the G and the 4. The space is essential to the efficacy of the recipe.)

The Mac Way of Doing Things

Machine chauvinism is basically silly. So in the ordinary course of events I avoid gloating over the immense superiority of the Mac way of doing things. Out loud. On the other hand, it IS fun from time to time to watch people in the world of mainstream, industry standard computing perspiring a lot to accomplish what I can do effortlessly.

Apropos of all of this there was a little gem in *InfoWorld* recently by a guy who was unhappy at how hard it was to get networked printers to print. "We just installed a new HP Laserjet Series II printer on our VAX 8650 network, and I decided it was time to learn how to use it," he laments. "Someone told me what the print command was, so I typed

'lprint/queue=center-laser book.jep.' "

It didn't work. He left out a "/passall/" between the "lprint' and the "queue" His problem is that no one thought to give him a File menu with a Print command to mouse.

This article consists of stuff I have found out and hope that others (some others, anyway) will want to know. If you decide that what I think I have found out is not actually found out, I need to know that. Contrary opinions will be received cheerfully but corrections of facts will be cherished. Comments, questions, or corrections can be hurled at me at (202) 546-9556.

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MACINTOSH VIRUS: Technical Notes—March 29, 1988

We have discovered a new virus that is circulating through the Macintosh community. This is not the now-infamous MacMag virus, but is a completely new and, as far as I can tell, unreported version. As of this date, we have not determined exactly what the virus does other than replicate itself. The presence of the virus in the Macintosh memory does causes several symptoms, which have caused losses of data. These symptoms include difficulty in running MacDraw, difficulty printing from any application (especially MacDraw), difficulty using the "Set Startup" option, difficulty running Excel, corruption of Excel files, and frequent crashes when starting applications. This virus has existed since at least February, 1988, and may have been around as early as September, 1987. Because we do not know exactly what this thing does yet, we are very concerned about the possibility of any invisible operations and "time bombs" that it may contain.

Identification of "infection":
It is possible to determine if this virus has infected your Macintosh with the following procedure:

1) Open the System Folder of the Macintosh and locate the "Note Pad File" and "Scrapbook File".
2) Examine the icons used on these files and check that they resemble the small Macintoshes seen on the "System" and "Finder" icons. If they do not, and instead resemble the standard Macintosh document icon (an upright piece of paper with the upper right corner folded forward), you are probably infected.
3) To verify infection, execute ResEdit or some other utility which can see "invisible" files. Examine the System Folder.
4) If the System Folder contains two invisible files named "Desktop" and "Scores", you are definitely infected.

The infection process:

The virus transmits itself from Macintosh to Macintosh by invading a standard executable application file on a contaminated Macintosh. When this contaminated application is copied to a "sterile" Macintosh and executed, the virus attacks the new system by making changes to the contents of the System Folder. First, three INIT resources are added to the "System" file. If the files "Note Pad File" and "Scrapbook File" do not exist in the System Folder, they are created. The type and creator fields of the "Note Pad File" are changed from "ZSYS" and "MACS" to "INIT" and "ZSYS", respectively, and an INIT resource is added to the file. The type and creator fields of the "Scrapbook File" are changed from "ZSYS" and "MACS" to "RDEV" and "ZSYS", respectively, and an INIT resource is added to the file. Two new, invisible files are added to the system folder, named "Desktop" and "Scores", each with an atpl, DATA and INIT resource. Note that this "Desktop" file is **not** the standard "Desktop" file that is found at the root level of every disk and diskette. The "legal Desktop" file has a type of "FNDR" and creator of "ERIK". Do not confuse the "Desktop" file created by the virus in the System Folder with the legal version found at the root level. The virus changes are summarized below:

File	Type	Creator	New?	Invis?	Resources		Size (bytes)
System	ZSYS	MACS	No	No	INIT	ID=6	772
						ID=10	1020
						ID=17	480
Desktop	INIT	FNDR	Yes	Yes	atpl	ID=128	2410
					DATA	ID=-4001	7026
					INIT	ID=10	1020
Note Pad File	INIT	ZSYS	No	No	INIT	ID=6	772
Scores	RDEV	ZSYS	Yes	Yes	atpl	ID=128	2410
					DATA	ID=-4001	7026
					INIT	ID=10	1020
Scrapbook File	RDEV	ZSYS	No	No	INIT	ID=17	480
						ID=6	772

Note that, unlike the MacMag virus, no "nVIR" resources are used anywhere. The modified files, "Note Pad" and "Scrapbook", still appear to function normally with the Note Pad and Scrapbook Desk Accessories, and any existing contents of the file's Data Fork are not disturbed.

Once the system files on the target Macintosh have been infected, the virus will then begin to attack applications. Not every application is attacked by the virus—the determination of whether or not to infect an application is apparently a random decision (at this point, no discernible pattern has been found, except that "Finder" and "MultiFinder" are usually attacked). Applications that are attacked on one Macintosh may remain sterile on another Mac, and vice versa.

As each application is attacked, the virus installs a new CODE resource into the application. The identification of this new resource is variable, depending upon the existing resources within the application. The virus apparently creates a list of the CODE resource identification numbers within the sterile application. It then checks the list for the first break in sequential numbers or the end of the list. The new virus CODE resource is then given an identification number one greater than the break in sequence or the end of the list. For example, HyperCard contains CODE resources 0 through 20, leaving an ID of 21 as the first unoccupied resource ID. The virus places the new CODE resource in the application with an identification one greater than that, as CODE ID=22.

The second step of the infection of the application is the modification of the CODE ID=0 resource of the application. In all of the infected applications which I have found, the virus modifies the eleventh word of this resource. In each of these applications, the eleventh word seems to normally be a pointer to the CODE ID=1 resource. Where the application would normally jump to the CODE ID=1 segment, the virus modifies this pointer to refer to the new CODE resource that has just been installed. The example below shows the first sixteen words of a sterile and infected version of HyperCard:

Sterile	**Infected**
0000 1EF0 0000 559C	0000 1EF0 0000 559C
0000 1ED0 0000 0020	0000 1ED0 0000 0020
0008 3F3C 0001 A9F0	0008 3F3C 0016 A9F0
0000 3F3C 0001 A9F0	0000 3F3C 0001 A9F0
...	...

contd.

The eleventh word has been changed from "0001" to "0016", which points to the new CODE ID=22 resource (hex 16 = decimal 22). Note that during our examination of suspected applications, we found that at least one compiler normally places non-"0001" values in the eleventh word of the CODE ID=0 resource. To verify infection, if the eleventh word is not "0001", check to see if the eleventh word points to the new CODE resource. If it does, then the application is infected.

The new CODE resource is a copy of the virus code, is of size 7026, and is executed when the infected application is invoked. When the virus completes execution, it returns to the invoked application, which appears to proceed normally. The first sixteen words of the virus are:

0000	0001	xxxx	3F3C
0001	A9F0	4EBA	002E
204D	D0FC	0020	43FA
FFEC	20D9	2091	204D

...

The third word of the virus code is variable, and may be based on the return address used when the execution of the virus is completed. The virus makes a third modifi- cation to the code of the application in a manner which has not been fully deciph- ered. This was determined by attempting to recover the HyperCard application by removing the new CODE ID=22 resource and patching the eleventh word of the CODE ID=0 resource. Any attempt to run the rebuilt application resulted in a system bomb, intimating that the virus has modified other sections of the application which prevented its complete exorcism.

Vaccinating your Macintosh:

If your Macintosh is infected, the contaminated system files and applications must be completely removed from the Macintosh, and new ORIGINAL copies should be installed. When removing the virus from the Macintosh system files, you cannot just go in with ResEdit and delete the offensive INIT resources—this virus is apparently intelligent enough to recognize this attempt, and modifies its resource identification and memory location when probed by resource utilities. For example, if you try to delete the INIT ID=17 resource from the "System" file, the virus recognizes this attempt and creates a copy of this resource with an identification of -1. As soon as you exit from ResEdit, the new INIT ID=-1 resource is copied back into a new version of INIT ID=17. ResEdit "thinks" that the virus resources have been deleted, but they have been renamed and return when the Macintosh is restarted. The system must be sterilized by the following step:

1) Examine EVERY application (including any in the System Folder, and on EVERY diskette you may have) with ResEdit. Check if a new CODE resource has been added, and if the CODE ID=0 resource has been modified to refer to the new CODE. This is the most tedious part of the process, and will probably take quite a bit of time. I have about 160MB of stuff on two 100MB drives, and this step took about three hours. If the application has been infected, list it. Note that this method of application infestation has found all of my corrupted applications, but I cannot guarantee that the virus is not attacking some applications in other ways. The only foolproof way to verify applications is to compare the version currently on the Macintosh with the original copy of the software on the vendor's distribution diskette, and make sure that they are the same size.
2) Using ResEdit, open the infected System Folder and locate the "Desktop" file. Select the file and use the "Get Info" option on the "File" menu. When the file information window opens, turn off the "Invisible" bit, then close the window and save the file information. Do the same for the "Scores" file.
3) Locate a sterile system diskette (preferably one of the "System Tools" diskettes from Apple), LOCK IT, and boot from it.
4) Throw away the following files from the infected System Folder: "System", "Finder", "MultiFinder", "Desktop", "Scores", "Scrapbook File", and "Note Pad File". Once these files are in the Trash Can, EMPTY THE TRASH IMMEDIATELY! Note: this is the minimum required to remove the System portion of the virus - my personal preference is to delete the ENTIRE System Folder, not just the suspect files in it.
5) Locate all of the applications which you listed in Step 1. Throw them away, and empty the Trash Can.
6) Shut down the Macintosh, and turn the power off. Do not just "Restart" your Mac! You must completely power down to guarantee that the Macintosh memory is cleared. Wait at least 30 seconds for memory to clear before rebooting again from the sterile diskette (the 30 seconds may not really be necessary, but better safe than sorry).
7) Reinstall the Macintosh operating system from the System Tools diskette to your Macintosh.
8) Locate your original copies of the deleted applications software. Before reinstalling the applications, examine each one with ResEdit to be sure that it is sterile. If there is no problem, reinstall the application.

A word of warning:

I do not know how far this virus has spread, or where it came from. The information contained above reflects only what we know so far about this virus—I do not know if it has any maliciously destructive functions which have not yet activated, or if it does anything other than procreate. I do know that it is extremely virulent—it has defensive mechanisms built in to protect itself from deletion, most of its resources are protected, and it places multiple copies of its components throughout the system to avoid single-point-of-failure destruction. This thing is an order of magnitude more sophisticated than the MacMag virus, and is considerably tougher to kill.

So far, the virus appears to only affect system files and application files. Data files (documents, spreadsheet data, HyperCard stacks, etc.) do not appear to be affected, and do not seem to transmit the virus. It is only transmitted during the execution of an application—inserting diskettes, copying files, and other desktop functions do not appear to activate the virus.

While apparently not maliciously destructive, I have established that the mere presence of this virus in the system is sufficient to cause printing and application instability problems. Once the virus has been removed, all of our reported Macintosh problems have gone away. I believe that whoever wrote this

contd. on pg 72

HYPERCARD SIG NEWS
by Robert C. Platt

The HyperCard SIG meets at 11:30 a.m. on the Saturday of the WAP main meeting. The SIG serves the interests of both new HyperCard users and experienced HyperTalk Script authors. Please bring your favorite stacks.

Books. A number of new HyperCard books have appeared on the market recently. See my review of *HyperCard Power* by Kaehler which appears elsewhere in this issue.

Tutorials. Our three-Saturday approach toward teaching HyperCard and HyperTalk has been well received. Hence, we are repeating the sequence beginning with "Introduction to HyperCard" on Saturday, May 14, followed by "Introduction to HyperTalk" taught by Holger Sommer on Saturday, June 4, and Rick Chapman's "HyperTalk: Advanced Problem Solving" on Saturday, June 11. Contact the WAP Office to reserve a place.

March Meeting. The HyperCard SIG's March meeting featured a demonstration of the Apple Computer Annual Report Stack by Bob Platt and a tutorial on user-created messages by Bob Schaffer. A lively question and answer session followed.

HyperDA. Symmetry Corp. is marketing a handy adjunct to HyperCard called HyperDA. It is a desk accessory which interprets and "browses" stacks. HyperDA offers impressive versatility for a 49K desk accessory. To use it, you select HyperDA from the Apple menu. A new pull down menu is added to your current MenuBar called "HyperDA" and an open stack dialog appears. Selecting Open Stack from the HyperDA Menu also launches the stack of your choice.

HyperDA differs in several interesting way from HyperCard and its principal use will be 1) to extract data from HyperCard for pasting into word processor applications or 2) for browsing stacks on 512K Macs. HyperDA does not support any editing or modification of stacks. For example, you cannot type new text into a field. However, the cursor becomes an I-beam whenever it is placed over a field (even a locked field.) This allows the user to select contents from the text field for copying to the clipboard.

HyperDA operates as either a card or as a separate window. This permits the user to use the zoom box and grow box to shrink the HyperDA window and rapidly cut and paste between the stack and another application.

To copy graphics, the user depresses the option key to convert the cursor into the selection rectangle tool. Selected graphics can then be copied to the clipboard.

HyperDA even supports the Message and Find windows. However, it has implemented only a subset of HyperTalk. It supports the following commands and messages: beep, closeBackground, closeCard, closeStack, doMenu, enterKey, find, go, hide, idle, mouseDown, mouseStillDown, mouseUp, openBackground, openCard, openStack, pop, push, put, returnKey, show, tabKey. When HyperDA executes a button script with a HyperTalk command which it does not understand, it ignores the button.HyperDA supports print Card but does not support print reports.On the whole this is a professionally implemented product with good documentation (including a Help stack.) I wish that it could have implemented a few more frequently used HyperTalk features. Perhaps an upgrade will be available to support "get," "it," "the date," "the message box" etc.

Reports (Nine to Five Software, distributed by Activision, $99.95). Reports is probably the worst example of VaporStackWare to date. Although highly touted for months, it did not appear on area store shelves until the week of April 11.

As everyone knows, the "Print Reports..." feature of HyperCard 1.1 has bugs. For example, when I am printing a column report, occasionally a blank page will be generated and the corresponding data will be skipped. This problem comes and goes. Retrying the print request after using the stack will usually work around the problem.

Reports is designed to overcome the limitations of the Print Reports... feature. It offers a graphics oriented layout editor. In addition, it supports up to 5 levels of sorting and breaks for grouping of items in a table. HyperCard will only allow all cards with a given background or all cards in the stack to be printed in the report. For a selective report, one must copy the desired cards into a separate stack and then print from this subset stack. In contrast, *Reports* supports selective printing without creating a separate stack.

VOLUNTEER PROFILES

We continue our portfolio of WAP volunteers, without apologies to the scotch whiskey whose ads suggested the format.

Name: Lee Raesly
Occupation: Computer Therapist
Residence: Clinton, MD
Computer: Apple II+, //e, //c, IIgs and IBM PC
Favorite Drink: Southern ice tea
Favorite Software: AppleWorks 2.0 with TimeOut accessories, WordPerfect GS
Service to WAP: Director-at-Large, Tutorial instructor, Apple II programs and Q&A sessions, Telecom.Sys. Operator, extensive contributor to WAP Journal, Public Relations Coordinator

Name: Paul Koskos
Occupation: Retired Electronics Engineer, now Computer Consultant
Residence: Potomac, MD
Computer: Apple II+, //e, Mac SE and IBM PC clone
Favorite Drink: Tonic
Favorite Software: AppleWorks
Service to WAP: Journal author, AppleWorks IRS tax template, Tutorial Instructor, Journal Author, Q&A Index, active Hotline Volunteer, WAP staff 1984-87.

Photos by Peter Combes

GRAPPLER C/MAC/GS

by Paul Koskos

What do you do when you buy a new Macintosh, but you already have a trusty parallel printer and don't want to spring for the heftily priced Imagewriter?

In my case, I asked my trusty full-support computer dealer, who handed me a box labeled GRAPPLER C/MAC/GS, UNIVERSAL PARALLEL INTERFACE. Remember those last three words. By the way, the box wasn't free—it ate up the best part of another $100 bill, of which I had precious few left after paying for the Mac.

Back home, after setting up the Mac, I opened up the GRAPPLER C/MAC/GS (let's call it IT from now on) and checked the manual, since I noticed there were four DIP switches to be set. HORRORS! PAGE 5 OF THE MANUAL VERY SPECIFICALLY STATED THAT THE UNIVERSAL PARALLEL INTERFACE IS FOR A SPECIFIED FEW PRINTERS, AND THAT ANY OTHER PRINTER NOT COMPATIBLE WITH THESE WOULD NOT EMULATE THE IMAGEWRITER WITH "IT". My printer, the C. Itoh ProWriter 8510 was not on the list! Nor are the Toshiba or NEC P6, for that matter.

The following printers are on the list: Epson FX-80, 100, FX+ and compatibles, Epson RX and compatibles, Epson LX and MX, Okidata Microline 192,193, and the Star Geminis SG, SD, SR, and 10X. Also the following color printers: Epson EX, JX, C. Itoh C310XPR(in Epson Mode), and the Okidata 292.

A table of DIP switch settings is provided for each of these settings. None of these settings worked with my ProWriter. I called Clinton Computer, who had no answer, but agreed to take back the offending hardware. Unfortunately, they had nothing else to offer in its place.

I then called Orange Micro, the manufacturer. A technician confirmed that I had a problem, and that Orange Micro might update their unit to cover the ProWriter in a couple of months. A couple of months? Oh yes, some woman had called in with some settings which she claimed worked on the ProWriter, here they were—or maybe they were the exact opposite—he wasn't sure.

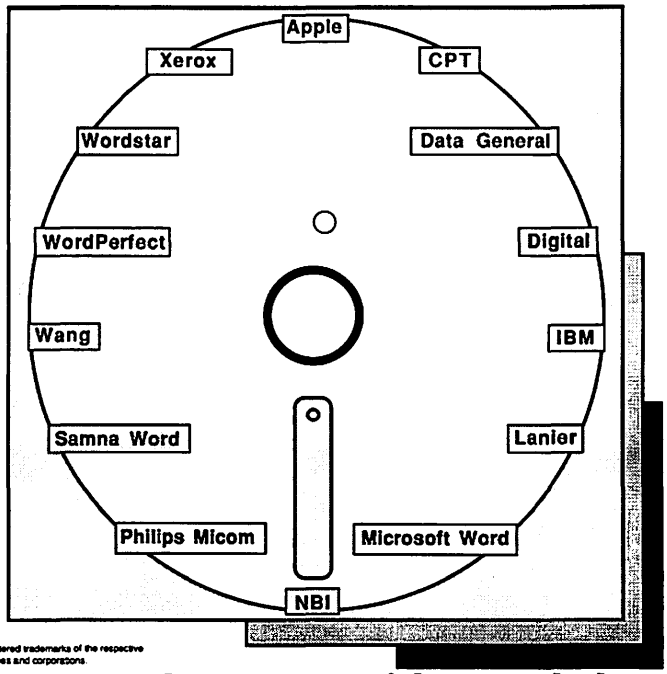
Desperate to print with my new Mac, I began to try other DIP settings, and finally found one that printed the letters of my document instead of garbage, but all in one line. Progress! Now with the help of another ProWriter owner, we combed the ProWriter manual and found a ProWriter DIP setting that would automatically add a line feed after a carriage return. End of problem.

The final GRAPPLER DIP settings are given below. They are different from any of the supported printer settings. I have also indicated the correct setting for the ProWriter DIP switch which are essential for this serial to parallel printer conversion to work. Good luck.

	GRAPPLER DIP SET				PROWRITER	
	A	B	C	D	S1-7	S1-8
C. Itoh ProWriter	ON	OFF	ON	ON	Close	Open

contd. on pg 73

Can all these word processing systems interchange formatted documents?



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IS YOUR SE FAN TOO LOUD?
NOW THAT YOU MENTION IT ...

by Chuck Sicard

Are you annoyed by the noise of the fan in the Mac SE? Some I asked said "no", others said, "yes". I knew my SE was noisier than my old Mac 512E w/butterfly fan. The quieter the room the more annoying the noise would be, if I thought about it. Ah, the power of suggestion; I hadn't noticed how bad it really was until everyone started talking about the noise from the SE fan. Suddenly, it was getting very annoying.

Mobius Products of 5300 Broadway Terrace, Oakland, California advertises the SE Silencer™, the ultra-quiet fan for $49.95 with solid ball-bearing construction. It arrived within two days by UPS to be installed by yours truly and with everything required for installation included, so the flyer said. According to the information enclosed my Mac would run one and a half degrees cooler and eliminate screen flicker (I had none in the first place). Also, it would only take 15 mins to install, all tools included.

Well, after a cursory review of the instructions I realized I would have to get a few more tools than those included. I needed a small philips-head screwdriver (not too small), 7/32" nut driver or socket wrench, wire cutters, and pliers. I was provided with a long Torx 15 (wire-like; nothing fancy but it works) screwdriver for the case screws. One can usually then pop open the case with a metal ruler or an old dull dinner knife rather than the traditional case popper tool. I admit it, I used my case popper tool. I had the four case screws out and the case off in less than two minutes but this wasn't a first for me.

One then removes two plastic pegs on the white plastic sheet that covers the powerboard so you can reach the four fan screws. With the fan loose you cut the black and yellow wires 1/4" from the fan. Now I was committed! Do you know the feeling? Already 23 minutes had passed but I wasn't rushing, in fact I enjoy marveling at the Mac insides, the SE is much more efficently designed than its predecessors.

At this point I looked at the next step down on the instruction page and almost went from step five to step eight (a little lay out change on the otherwise clear instructions would be advised; also check the spelling of component). I placed the two self-adhesive mounting rubber gaskets on the base of the fan. Enclosed were three neat little clear plastic buttons (one extra in case you mess up). The un-stripped wires are inserted fully into the first plastic button (black to black) and you squeeze gently straight on the yellow button with pliers. A little jelly substance comes out when this is fully pressed. You do the same with the yellow and red wires in another plastic button. Like magic, the new fan wires were connected (I hoped) without soldering.

Now it was time to mount the SE Silencer, I was back to step eight. I had to look carefully to really determine that I was going to use two holes "between" (that word needs to be added to the instructions) the original four mounting holes using the two machine screws provided. Easy, if you look closely at figure 5 in the instructions. Things went together much faster than they came apart. I plugged in the power supply cord and turned the power to the Mac on before putting on the case (a little risky, since I've now recharged the high voltage components). I wanted to see the fan work with my own eyes. It did, I did!

I noticed that there were addendum instructions for a Mac SE w/soldered fan which required soldering to only be done by an experienced person. I'm not sure how one would know you have a soldered fan unless there are no wires to cut. I'm glad I didn't have that problem.

I slipped the case back on and replaced the four screws; total lapsed time was 49 mins. If I had to do it again I could do it easily within 15 mins but then I wouldn't need to read the instructions. The instructions failed to remind me to replace the plastic plugs that held the white plastic sheet that covered the powerboard. Oh well, I'll replace those next time I pop open my case.

When I returned my Mac to its home it was indeed much quieter. In fact, it seemed more like my quiet Mac 512E, a pleasant nostalgic feeling. My Mac SE has been improved and I'm glad I did it. Now it's your turn.

You might want to check out your dealer, if your Mac SE is still under warranty. Who knows, you might get this service done for you for less. Too bad Apple didn't simply permit owners to upgrade the fan for a very nominal cost (try free). Why did they make such a fine computer and put in such a low class fan?

Macintosh Virus contd. from pg 69

could not foresee enough of the potential system configurations to prevent an occasional collision between the virus and other active applications and printer drivers.

The "Vaccine" CDEV which is currently appearing on bulletin boards is only marginally useful in fighting this virus—if your system is already infected when you install Vaccine, you will not get any warning from Vaccine that the virus exists. If you have Vaccine installed on a sterile system and this virus is introduced at a later time, Vaccine will only warn you of the virus attack, but will not prevent infection.

Apple in Cupertino has become intimately aware of this virus in the last two days. They are going to be working on a more complete disassembly of the virus, and will hopefully be able to determine exactly what this thing does.

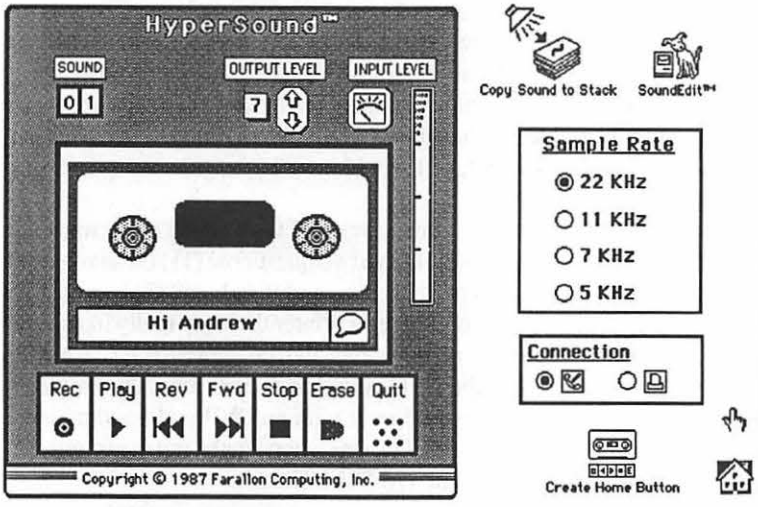
MacRecorder™: Add Sounds to Stacks!

by David Kreisberg

During the last year, popular items on bulletin boards and PD libraries have been sounds—for starting up the Mac, replacing the traditional beep, and inclusion in HyperCard stacks. The sounds range from wacky Monty Python quotes to synthesized instruments. The ease in which sounds can be placed, with utilities like Sound Mover, make them a fun way to spruce up stacks.

MacRecorder™ from Farallon Computing ($145 from MacConnection) is a device to digitize sounds and save them as 'snd' resources used by HyperCard, or in formats used by SoundEdit, SoundCap, Soundwave, Videoworks, and Studio Session. The hardware is a small box with a built in microphone, mike line input, line input, and level control that plugs into the modem or printer port. It is possible to record in stereo, but since I don't have a Mac II (yet!), I have to take their word for it.

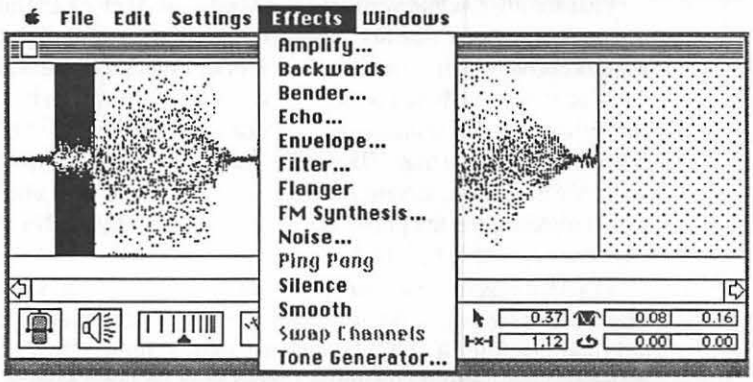
Most of the three disks provided are stackware. The main stack is called HyperSound which looks like a cassette recorder. You set input and output levels on the screen and determine the sample rate for the sound. The higher sample rates (22 KHz and 11 KHz) give you better frequency response, but less recording time and greater demands on memory.



Recording is as simple as clicking on the record button and speaking into the built-in mike. Type into the Name Box to identify the sound and listen to it by pressing Play. The Copy Sound to Stack button gives you a dialog box to choose your destination stack. When you find the appropriate card, you paste the sound. A button is created named "Play (your sound)".

Sounds can be modified (and recorded) using SoundEdit. Here you see the sound's waveform and, using click and drag techniques, you can cut, copy, and paste from the Edit menu. Special effects can be created for selected sounds (or portions of them) with the Effects menu. Some possible effects are to amplify, play the sound backwards, bend the pitch, add echo (you set the delay and strength), filter the sound with what looks like an equalizer, and much more. SoundEdit has a mixer which allows you to combine and adjust the volume of up to four sounds.

The documentation (over 100 pp.) devotes a chapter to the structure of sound, but the bulk of the manual gives a detailed



explanation of the features of HyperSound and SoundEdit. The only thing missing is a tutorial taking you through some of the more complex features. It isn't difficult to get started without it.

If you are hooked on sounds, MacRecorder may be the product for you. It's easy to use, well-documented, and allows some sophisticated modifications to sounds. I think that one area in which MacRecorder's potential will be reached is in educational stacks. For example, one of the MacRecorder demos shows a face. When you point and click on each part of the head, the corresponding French word for the nose, eyes, etc. would be spoken. It may be possible to do something similar with MacInTalk, but a student might get the impression that a French person spoke more like the Talking Moose. Equipped with artistic ability (or MacVision), MacRecorder, and a little knowledge of HyperCard, some innovative stackware is bound to come!

Grappler C/MAC/GS contd. from pg 71

Final Thoughts: I find it difficult to adequately express my opinion of Orange Micro. On the one hand, they have produced a piece of hardware which does a yeoman job. And yet—to hear them say that, "Maybe they'll have a solution to the ProWriter problem in a few months," after they hear from one customer that the solution exists—does not convey a feeling of high power minds at work. This is particularly so since after two hours of experimentation with their unit, someone who knows nothing about its design and construction re-discovered the solution without any modification of the GRAPPLER C/MAC/GS. A C-grade for Orange Micro on this one!

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Letters to the Editor

Dear Editor,

Last summer, while verifying the Macintosh II clock timing accuracy, I noticed that my relatively inexpensive $30 digital watch kept better time than the Mac II clock! I synchronized both the Mac II and the digital watch to the standard time given by C & P Telepone in Washington DC. After a couple of days, the Mac II was running more than 10 seconds fast while my digital watch was only about one second fast relative to the the C & P time, which matched the telephone time standard given by the Naval Observatory, (202) 653-1800.

In one series of measurements over a period of 5 days, the Mac II clock ran faster by one second for every 7.4 hours of elapsed time. In August 1987, I contacted John Bennison, a WAP member, who performed similar timing tests on three separate Mac II computers. Over a 90-hour elapsed time period, Bennison measured 5-second, 6-second, and 8-second faster Mac II times, which result in the Mac II timing one second faster per 18 hours, 15 hours and 11.25 hours of elapsed time, respectively.

In summary, the Mac II clock runs fast. In most applications, the faster clock creates no problem, but in critical long-term timing applications, the Mac II user should be aware of this timing phenomenon.

Finally, I asked Joe Black in the service department of Clinton Computer in Alexandria, VA to contact Apple Computer via AppleLink. He has not yet received an explanation from Apple as to why the Mac II clock runs fast. I also wonder whether the other models of Apple computers exhibit fast clocks.

Sincerely,
Robert C. Fukuda
Laser Scientific Research Force
Alexandria, VA.

Dear Editor,

Regarding the article in the March 1988 Washington Apple Pi Journal by Charles Geer and Marty Milrod on Word footnotes, the following information may be of general interest. Recently, while working on a document with around four to six footnotes per page, I discovered that Word 3.01 still has occasional difficulties properly formatting the footnotes at the bottom of pages. The problem, which users of Word 3.0 may recall, is that under certain conditions the program would refuse to split long footnotes between two successive pages, even when there was clearly room on the first page for a portion of the footnote. As a result, the entire footnote would be pushed to the next page (along with its text line) and I would end up with a large blank area between the bottom of the text and the beginning of footnotes on the page where this glitch first occurred. These blank areas, which in my case constituted as much as a third of a page, were visible both in Page Preview and when the page was printed using the Imagewriter II.

I tried unsuccessfully to get some help with this problem from Microsoft's technical support people over the telephone. Unfortunately, the individual I talked with was evidently unfamiliar with footnote use and had extreme difficulty comprehending the problem I was experiencing. Worse, once I finally managed to explain the problem, she took the position that: (1) Word is designed to break long footnotes between pages if any portion of the note can fit on the first page (which, of course, I already knew); and (2) the problem of non-breaking footnotes I had described was not known to occur (which, of course, was why I was calling). In frustration, I mailed a copy of my sytem (4.2), finder (6.0) and the problem document file to Microsoft.

Microsoft responded promptly by mail. The letter I received from one of the company's technical support technicians noted that my problem was a known glitch in Word 3.0, "but was thought to have been corrected in version 3.01." My file showed, however, that "the problem may still occur in some cases." Happily, though, Michael Thurlkill of Microsoft went on to provide a simple fix. All you need to do is to insert, at the top of the first page where the problem occurs, a section break (Command - Enter) formatted as "No Break" or "New Page." Once the properly formatted section break is inserted, the problem footnote is immediately broken between pages and the disconcerting gap eliminated.

Barry Watts

Dear Editor,

I have had a Mac+ and an Imagewriter II for a year now, and the printer has worked well for most of that time. During the last five months, however, I have had it in for service about four times for: tiny and not-so-tiny white horizontal lines going through the print, and jamming—pushing the paper through under the paper feeder roller and not pushing it through on top, so all the print goes onto one line. I have been told that the the innards have been replaced with new components, and I even called Eric in Rockville, thanks to David Morganstein's appreciative letter about him, but Clinton Computer at Tyson's has been unable to fix my problem. I had intended to sell my Imagewriter I, but am really glad I didn't, or I would have been without a printer for many weeks.

Before I give my Imagewriter II to the trash collector, I am writing in desperation. I have two questions: (1) Has anyone had this problem fixed permanently, and if so how? (2) Has anyone who owns a Mac+ purchased a printer that they really like that is not much more expensive than the Imagewriter II? I am so dissatisfied with the IWII now that even if I get the problems fixed I would never replace it with an IWII and am thinking I would like anothe type of printer when I make my next purchase. If you can help, call at 476-8814.Thanks.

Stefani Cochran

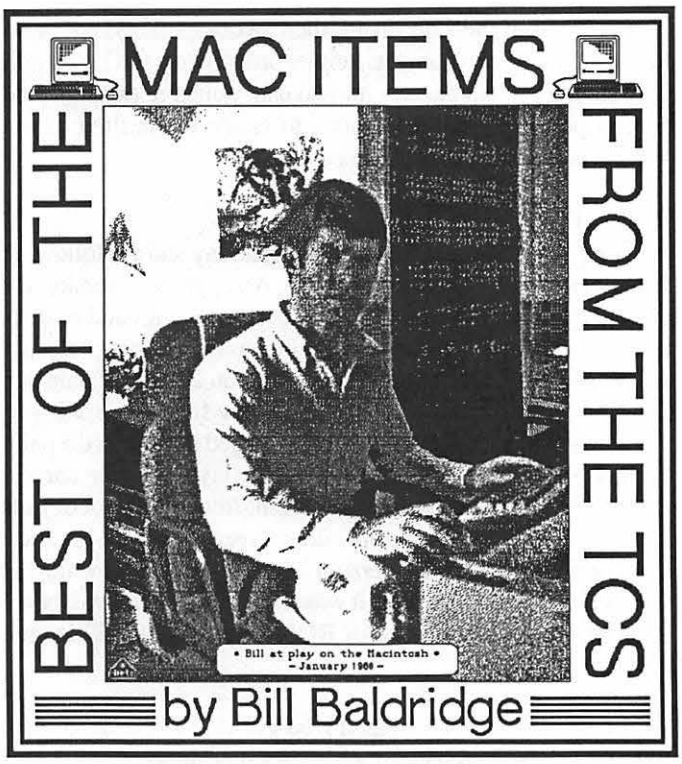
Dear Editor,

This is a comment on the March issue of the Washington Apple Pi Journal. In the collection of bulletins from the TCS, on page 74 there were several comments and questions about a DA called the "Talking Moose." At least one person stated that this DA no longer worked under the new system software form Apple, while another stated it wasn't MultiFinder compatible.

The two statements are incorrect! On page 84 of the December 1987 issue of Washington Apple Pi there was a patch for the Talking Moose (version 1.2) to allow it to work with the newer system software. That patch had been posted on the TCS by Michael Lockwood back in Octover 1987 and also re-published in the December issue of SNAC-Time, the newsletter of the Southern New Hampshire Apple Core.

The patch is: Find the Hex string D3C0 2211 6700 and change it to D3C0 2211 6000. I have applied this patch and the "Moose" works fine with the new system software including MultiFinder.

Timothy E. Adams



C Programming

LARRY CYNKIN on 04/05
I'm new to WAP and this BBS, but not to C programming (at least not on UNIX and (GASP!) DOS. I would appreciate opinions on whether MPW C is worth the money over Lightspeed C from anybody familiar with both (I am assuming I can narrow down my compiler search to those two).

KEVIN HARRIS on 04/05
I would suggest Lightspeed C over MPW C as far as User friendliness. It is also MUCH cheaper.

STEVE SCHNEIDER on 04/06
I have LSC for my Mac and Turbo 4.0 for the IBM at work. I think both are GREAT. Get someone's opinion on Turbo for the Mac before you choose LSC!

Data Bases

LOUIS M. PECORA on 03/02
I don't usually hang out here, but I need some suggestions for a simple data base program. I'm presently using OverVUE, but although it's plenty powerful enough for me (maybe more than I need, really), it has its problems: doesn't adhere to Mac interface so well, fixed window size, constant problems with new systems (sometimes making it unusable until I get the new upgrade), incompatible with QuicKeys (which I use a lot and love), and some other minor things. My problem is that I'm not too familiar with data base programs for the Mac. My biggest use of a data base would be for keeping address lists, and or other lists of people and some notes to go along with them. I need to be able to print "reports" of these lists on the LW in a flexible format. I occasionally need to merge lists, but I doubt that I need fully relational capabilities. I do need to be able to select sub lists from a list (using the usual matching criteria) and print them to disk (text, various delimited formats) and to the LW and IWII. Any help on this is deeply appreciated. Thanks.

DEACON MACCUBBIN on 03/03
Record Holder Plus is ideal for your needs. It is extremely easy to learn and use. Most people can be using their data base in about 15 minutes from opening the package. It features a very Mac-ish interface, variable field sizes (if you set up a ten character field and then need to enter twenty characters, it lets you automatically), allows you to add new fields on the fly (so you don't have to spend a lot of time setting up your data base in the first place), handles all Mac fonts, styles and sizes, and has a very flexible reporting mode. Best of all, it's less than $50 from MacConnection. If you want to do mail merge with MacWrite, the same company (Software Discoveries) has a MacMerge program that makes a seamless integration of MacWrite and Record Holder Plus.

DEBRA LASHBROOK on 03/22
I have been asked to select a multi-purpose data base for my employer, to be used in conjunction with employee time records, hours spent on certain projects, and total hours worked on each individual project. Some projects might be broken down into 1) contractual time and 2) additional services. This helps when the client asks for a breakdown between the two services. The package should allow 1) the date worked, 2) the project name, 3) whether the project is listed by contractual phase, or by additional services, and the hours worked. This is the way our old Lisalist package worked, to a fair amount of success. I would sincerely appreciate any advice or suggestions, especially with regard to the MacII, printing to a LaserWriter (our set up at work). I have considered some of the "5-mice" packages rated in MacUser, but am not interested in "baptism by fire" in such an endeavor as this. Would appreciate any help. Thanks!!

JOE WHALEY on 03/22
Reflex Plus is a relational data base program which seems easy to use and prints well to a Laser. I use it to keep track of my clients and open/closed files. One of the nice things about it is that I am basically ignorant about data bases, and Reflex allows me to tinker with field lengths, add fields, delete fields, etc. painlessly. I have one data base of all my client data, and a separate data base of the actual matters. Some clients have only one open matter. Others have dozens. Since it is a relational data base I just enter the client data once, and it is linked automatically to the various matter records. One of the sample sets of linked data bases they include on their disk is an attorney billing setup, with separate data bases for clients, attorney's, cases, and time slips, which automatically prints detailed bills. I don't keep billing records on it myself. But I print out current client lists, lists of open matters, lists of closed matters, an "address book" showing just client names, addresses, and phone numbers, etc.

Desk Accessories

CHARLES REILLY on 03/17
Can you please recommend a dictionary DA or full program that has definitions, like a book dictionary.

DAVID GURSKY on 03/17
Coach Pro is an integrated DA with spell checking, thesaurus and

contd.

DEFINITIONS. The only limitation is you really need to run it on a Mac with 1 megabyte or more. It will work on the 512E, but not with all applications.

Entertainment & Education

DEACON MACCUBBIN on 03/06
Just got a message from Cliff Johnson, the creative genius who brought us The Fool's Errand. He's got two more games under construction. I don't recall the name of the first, but the second is a sequel called Fool's Paradise. He promises lots more brain teasers for Fool addicts.

BILL BALDRIDGE on 03/14
Whoopie! It's a winner!! Been all gassed up over Beyond Dark Castle the last few days. The sequel is up to the standard set by its predecessor. If you make it through all three levels on this baby you're ready for the "Golden Fingers" award. Five stars, all the way! P.S. A couple of tips—to get the globe in the East Tower you're going to have to do some serious jumping... DOWN! And have your shield ready! And to have some yucks, jump up on the table in the Dungeon BEFORE you've stopped the pendulum from swinging, and try jumping while crawling through the tunnels in the Labyrinths at intermediate/advanced levels... These guys have a sense of humor!

The ** MAC ** Union

ELLSWORTH BROWN on 03/22
Heard a great new word the other day. I was using Kinko's self-serve Mac, booting up my software, and getting into one of those situations where the disc drive keeps spitting out the disc, asking for another one, spitting that one out, over and over until you are ready to stomp on it. The Kinko's manager was sitting nearby, working on one of the other Mac's. He glanced over and inquired sympathetically, "Floppy-swappy?"

Graphics & Design Software

JERRY WALZ on 03/06
Bill, I understand that you have expertise with Thunderscan. I need the capability to occasionally scan art and photos for a RSG 4.0 newsletter but can't quite justify a couple of grand for a conventional scanner. I see that MacWarehouse has a special of $172 for TS 4.0 including port for Plus/SE and would like to know what your opinion is for this use. No need for very rapid scans.

BILL BALDRIDGE on 03/07
TScan is a very good alternative for those needing digitized art on a budget. If you have the memory, you can scan 8x10 documents at up to 800% magnification—that's BIG! Actually, the "theoretical" limit to its resolution is 300%, but that gives you 300dpi (almost) with full gray scale. TS4.0 can also export documents in EPSN, TIFF, and PICT, so you're all set for importing into page layout applications.

DAVID HARRIS on 03/07
This from the April issue of MACazine (p. 92)—To create smooth (Bezier) curves in MacDraw, create an open polygon with four points. Double-click on the last point to ensure that the polygon stays open. While the polygon is still selected, choose "Smooth" from the Edit menu, then "Reshape Polygon", also from the Edit menu (doing it in either order seems OK). You will now have a smooth curve with two end-points & two mid-line control points. Drag these points to create the desired curve. When completed, deselect the curve.

RICK STICKLE on 03/29
A flyer from Silicon Beach came in yesterday and the following is a brief summary of the information. An upgrade to version 1.1 of Superpaint is now available for $5, it fixes bugs and ensures compatibility with Multifinder. Silicon Beach suggests that unless you need it that you wait for version 2.0—available late 2nd Qtr. The upgrade will cost $50. New features in 2.0 will include: AutoTrace—tracing of bit-mapped images in the paint layer to make true objects in the draw layer; Bezier curves; expandable paint palette; new air brush; free rotation of objects and text in draw layer; multiple draw layers; graphics libraries; color preview on Mac II—version 2.0 remains black & white but includes this preview option. It was also stated that 1.1 will be the last version to support the 64K ROMs, version 2.0 will require the 128K ROMs.

Hard Disks

COLIN POVEY on 03/12
After looking through the last 80 or so messages or so in this BBS, it seems that CMS drives have strong proponents and opponents. I do not have one, but my friend that uses one at his office has had trouble with his. It seems that you either get a CMS drive that works fine or yours causes trouble. This seems to indicate a lack of Quality Control. On the other hand, no one seems to have a bad word to say about Jasmine drives, except for their removeable media drives. Some of my customers have Bernoulli type drives, and indicate the same type of thing; they work fine for while, but the disks don't last too long. Seems to be inherent in the basic design of Bernoulli drives. I myself have a Peripheral land 30 MB drive that I purchased at MacCorner for $689.00. No problems with it, though it is not the fastest. They also make a PL 30 Turbo, which is supposed to run a lot faster, though it costs $200.00 more.

JOHN PAFF on 03/25
The Apple drives have some advantages: You can get Apple Care; high quality, and are easily replaced when bad. Obviously, the company will be around for a while, so you won't have an expensive orphan. On the other hand, they are more expensive. Apple uses, for example, Quantum 40 Meg HDs in the MacII. You can get a Quantum 80meg from CMS for about the same price. The ROMs are different, but the same make and quality. CMS (and other mfrs') give you a longer warranty, but after the first year, Apple Care does have its benefits. The Apple drive is, and will remain, by definition, compatible (with future operating systems, A/UX, etc.—others may require updated drivers,etc.).

HyperCard

MARK FRIEDMAN on 03/03
I am trying to write a button script which will clone the current stack. The only way I know to do it now is to doMenu "Save a Copy..." But this puts the user into the standard file Dialog requesting a filename. I don't want the user to have to give the

contd.

name, I want it to come from a container automatically in the script. Any help would greatly appreciated.

BILL BALDRIDGE on 03/05
There currently is no way (that I'm aware of) to pass a variable to a standard dialog box. This is an area Bill Atkinson said is on his list of 30+ desired additions to HyperCard. The only way would be via an XFCN.

DAVID KREISBERG on 03/13
I finally gave into my obsession with sounds in HyperCard. I took your advice and bought MacRecorder instead of Soundcap. It was $150 from MacConnection. It is great! There is a built in microphone as well as options for adding an external mike or line input. There are three disks of software that come with the package—mostly in HyperCard stack form. The program allows you to save the sounds in a variety of formats—Studio Session, beeps, HyperCard sounds, etc. I've just started playing with it, but it looks like a lot of fun.

DAVID HARRIS on 04/01
A new goody for Andrew Gilmartin's PopUpMenu: Start the name of a menu item with a left parenthesis (. The menu item will be dimmed and not selectable. Goody #2: Use just one dash '—' as a menu item. It will produce a dotted line across the menu which can be used to separate menu areas. A '(-' will make the line non-selectable, which is probably what you'd want. You too can have menus just like the sophisticates... Tips via Jerry Daniels in May MACazine. He has good tips most every month. Not always completely correct, but cute!

Other Hardware

FRED SEELIG on 03/26
Recently there was a thread on board #4 about keyboards. The thread started with screen saver software and migrated to keyboard problems. I have noticed problems with every keyboard made for the SE and the II. it seems that it is the Apple Desktop Bus, or ADB in Mac parlance, that is the culprit here. This bus is, electrically, a wire to which is inductively coupled all of the ADB devices, such as the keyboard, the mouse, and any other devices (e.g., stylus, digitizer) you wish to hang on to the bus. Each device communicates with the Mac asynchronously. As with any asynchronous communications network, there is a possibility that some devices will lose touch with each other and will try to gain access to the net again. The process is inherently probabilistic. For some reason, the probability of the keyboard 'locking up' is quite high (I have observed some SE keyboards lock up at least once a workweek). Fortunately there is an easy fix to this event happening. You do NOT have to reboot your Mac. You merely disconnect the keyboard and reconnect it. Since no DC current is involved at the physical level of the connection, there is absolutely no danger of hurting your computer or keyboard by doing this. The keyboard and the Mac get reacquainted quickly, and the use of the Mac returns to you. Unfortunately you are stuck having to do this every time this happens to your keyboard. It can happen to mice too. I don't know what Apple can do to fix this. Personally I think it was a dumb idea of Apple to design the bus. Far better to have had a bunch of slave devices hanging off the host, like the mouse and keyboard of the Mac Plus. No contention problems, no data collisions, no lockout problems. Well, this is just an extended grumble. I sure wish Apple designers had adhered to the "If it ain't broke don't fix it" philosophy.

BILL BALDRIDGE on 03/26
I agree 100%. Gimmee a plain dumb keyboard any day... KISS [Keep It Simple, Stupid! – .ed].

FERNANDO SALAZAR on 04/07
What is the name of this dealer that claims to have 1 meg SIMMs in stock?

BILL BALDRIDGE on 04/07
Microtek (800–654–4169) HAS 1 meg SIMMs, no wait, guaranteed—IF you want to pay $318/ea. I spoke with them (they called WAP) last week. Enjoy!

Misc. Programming

FERNANDO SALAZAR on 03/23
When I got my TML Pascal upgrade to 2.5, a program I was working on would no longer work with Systems <4.1. The reason - new print traps. I would like to maintain as wide a compatibility as possible. I have the chart that shows which systems are best to use, etc. It lists a System 3.3 Finder 5.4 as OK for 512K and 512KE Macs. My question—does this pair have the same printing stuff as is in 4.1? I've been looking around for these two, but haven't found 'em to try out. This is not a real pressing concern. The programming boards have been kind of slow lately, so I figured "why not ask?" Thanks in advance.

TOM RUSSOTTO on 03/29
No, 3.3 does not contain the new print traps. You might want to check to see if the system version is below 4.1 and if so use the old printing routines.

Mac 'System'

BRAD FLIPPIN on 03/08
Question: How do you "rebuild the desktop?" This sounds easy but I can't remember how to do it. I looked in IM, but I can't find it anywhere in there, nor is it in the Mac+ owner's manual. Where is it documented? Reason I need to do that is some of my ICONS are coming out with the generic icon. Rebuilding it gave them their correct patterns. (Your memory goes with age, I guess.)

DEACON MACCUBBIN on 03/08
Two ways: Hold down the Option and Command keys while rebooting. You'll be asked if you want to rebuild the Desktop—say YES. Or use Disktop, DiskTools or some other file diddler to delete the invisible Desktop file (while in an application other than the Finder).

RUSSELL GOINGS on 03/16
Can anybody help me find a screen saver that comes on after a set time idle? I am running with a Datadesk–101 keyboard. Pryo is nice but it bombs out with the Datadesk–101.

BRAD FLIPPIN on 03/18
I use AutoBlack from Itty Bitty Computers, P.O. Box 6539, San

contd.

Jose, Calif 95150-6530. It is a shareware INIT and I love it. It is simple to install, simply put it in your system folder and it does the rest. It turn the screen black after about 5 minutes and a clock face jumps around the screen to indicate the system is still on (jumping prevents burn-in). If you want to shut it off fast, put cursor in upper right corner (2 second and poof). If longer, put in lower right corner (2 hours and poof). When you put it in your system folder you rename it to MacsBug. By the way, the shareware price Itty Bitty requests is only $5, well worth it. In fact, I'll see if I can upload it.

Pascal Programming

JIM DONNELLY on 03/07
Suppose you want the user to specify a file type. If you ask for this in a text dialog item, what you're handed back is a Str255, and you have to convert it to an array[1..4] of CHAR before you can stick it onto a file, or use it at all. I once tried about a dozen different ways of coercing it to an OSType, but each time the compiler blew the whistle on me: incompatible. I ended up by checking that the string had a length of 4, and then copying it bit by bit into a new variable, starting with the ninth bit. This works fine... but there MUST be a neater and more direct way of doing it. How is it normally done?

FERNANDO SALAZAR on 03/07
I don't think there's any easy way to do this by type coercion. Try using BlockMove, for example:

```
VAR myType: OSType;
myStr: Str255;
BlockMove(@myStr[1],@myType,4);
```

This should move the first 4 chars from a string into an OSType variable.

FERNANDO SALAZAR on 04/05
Just a note on something I noticed... In TML Pascal 2.5, the glue for SysEnvirons returns wrong info when the current System file is earlier than 4.1. The most damaging is that it returns TRUE for has Color QuickDraw. Also, machineType will always be set to 512KE, no matter what. I don't know if TML is using an early version of the glue, or if this feature is unique to TML. In general, I think the best idea is if SysEnvirons returns envNotFound, assume the lowest level Mac.

Printers

JAMES AVERY on 03/05
Does anyone know where and what price for a serial to parallel converter for the Mac?

BRAD FLIPPIN on 03/08
GRAPPLER is manufactured by Orange Micro, Inc. in Anaheim, Calif (800-223-8029). The current MacWorld (March 88/Page 256) illustrates the GRAPPLER LQ. It is a 24 pin/Laser interface. They make a Grappler C/Mac/GS for 9 pin models, also. It is shown in the Nov 87 issue of MacWorld (pg. 294), but it looks about the same as the LQ version. "First it converts serial to parallel then interprets the IWII or LQ code into unique printer codes. A single DIP switch makes it work with Epson, Toshiba, Okidata, Star Micronoics, Panasonic and other supported dot matrix printers."

DAVID HARRIS on 03/25
Most of the time when I print out a page on my Imagewriter II with "faster" print quality I get a few lines of slanted characters, a little like italics. Any cures for this?

DEACON MACCUBBIN on 03/25
Do you mean you get a line of "squished" or "wiggly" characters about an inch from the top of the page? If so, you can (1) use single sheets rather than pin fed ones, (2) buy a sheetfeeder, or (3) avoid printing in the first inch. This is a well-known defect in the IWII and there's no easy fix for it.

FRED SEELIG on 03/25
I am in the process of saving up every penny for a LaserWriter. Consequently, I must make do with this ol' ImageWriter a little longer. Here's the problem. After a few years, the print head seems clogged a little. The print is not as sharp as it could be. I have taken it off the printer and disassembled it and doused it with WD-40 and carefully wiped off all of the residual ink and junk in the printer head. Seems to improve the print but not make it as sharp as it used to be. Can you or your wizardly crew fix it for cheap? Or, do you sell a new IW 1 print head? I could buy it and put it on myself. What's the cheap solution here?

BILL BALDRIDGE on 03/26
Quit using cheap ribbons. I've used ribbons, and I've used ribbons, but there's no substitute for a good ribbon with good ink...there really is a reason Apple charges $12 for an Imagewriter ribbon. It may not be WORTH $12, but at least you're getting the best print quality possible. I personally use cheap ribbons for cheap work (draft prints, letters home, cheap customers), and Apple IW ribbons for quality work.

Rumor Manager

PAUL CHERNOFF on 03/04
I have read that the Mac SE price will go down in 6 weeks when the Mac Plus is officially taken off of the market. Just a rumor from the latest MacWeek.

LARRY STEDMAN on 03/31
What's happening to the price of Plus upgrade for the 512KE?

JOHN PAFF on 03/31
The last time I checked they were still the same. Kind of makes one curious, though, doesn't it? I can't think of any (nice) reasons why they don't drop in price! I'll double check, though, to make sure.

Telecommunications

ALLAN LEVY on 02/29
What are the latest recommendations for a Mac BBS program?

BILL BALDRIDGE on 03/01
How much money do you want to spend? The cheapies are Red Ryder Host and WWIV BBS (that's World War IV), which I've never seen and only read about in passing - someone else will have to fill in the gaps. On the high end, there's a package from TeleSources (in Calif - check MacWorld classifieds), which

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offeres a Finder-like interface to users, where you just point, click & drag, just like you were working at your own Mac. Price of this latter set-up is $8300 for the "starter" system, which includes 512K Mac, 20M Hard drive, 6-port serial controller (for six modems), software, & support.

DAVID GURSKY on 03/01
Let me throw in a recommendation for WWIV. It is a shareware package and a fairly solid one at that. Unlike Red Ryder Host, WWIV is actively supported and a new version with more features will be out RSN. If you are interested, give the Mac Programmers West board a call at 1-503-222-4258. Mac Programmers is the support BBS for WWIV. Needless to say, they use WWIV. Not bad.

ERIC RALL on 03/17
I called Software Ventures to find out about Microphone II. It will definitely (maybe) be shipping on April 4th. For those who have purchased Microphone 1.1 after December 15, the upgrade is free. For us pioneers the arrows in our backs cost $50. I don't have my notes with me, but it does sound like a MAJOR upgrade. VT102 support, except Double High, Double Wide. Scripts can be imported and exported a text files (It's about time!). Scripts also include a number of new capabilities and most of the menu items are available as Script commands. I'll try to find my notes and post the full details. But If you haven't registered your copy of Microphone 1.1, you will not be able to upgrade, so REGISTER now!

Utilities

BRUCE LANE on 04/06
The May '88 issue of MacUser has a great tip on page 125 on how to change the "personalized" copy screen on Microsoft Excel or Word 3.01. I haven't tried it yet, because I don't have Fedit. Is Fedit public domain? Is it available on a board? Can anyone tell me where? Once I find a copy of Fedit, I'll report on whether or not the tip works.

RICHARD BROSNAHAN on 04/07
Fedit is not public domain. It is produced by MacMaster systems. They have apparently abandoned it, as their promised upgrade is at least a year late. Fedit Plus is the latest version available and is a usable product with many limitations dealing with HFS. A public domain program you can consider to do what MacUser suggested is MacSnoop. This is shareware and well worth the money. MacTools in the Copy II Mac package is also very good. That product is, of course, commercial.

Word Processors

ELAINE PADOVANI on 03/12
I noticed on GEnie that MacWrite and MacPaint have been updated in versions, and I wish to know whether or not I can get my MW 4.5 and original MP updated. Also how much it will cost, and whether or not it is worth it.

PAUL CHERNOFF on 03/13
Contact Claris software (they have a 800 number). They will send you a form. You fill it out, write a check for $50 ($25 for McP and $25 for McW) and the mail it with the original disks. Then they send you (pretty quickly) a completely new McP and McW, with disk, manuals and boxes.

KARL WOLF on 03/15
The phone # for Claris is 1-800-544-8554 between 8:30 and 5:30 PST. They will send you an information packet and mailer.

TOM DEMAY on 03/23
Has anyone heard about an upgrade to Microsoft Word to 3.02?

PAUL CHERNOFF on 03/23
WORD 3.02 is the latest version of WORD. It has one improvement over WORD 3.01, it works with the ImageWriter LQ (Microsoft once again doing things its own way, wrote 3.01 so it works only with the regular Imagewriter). If you have an IWLQ the upgrade is free. If you don't have a LQ, don't bother.

Mac SE/II

FRANK SORNATALE on 03/12
It is imperative I have DOS capability so I am thinking of getting an IBM clone, before I do I understand (I have a IIGS) the MAC does DOS. Does the SE have DOS capability?, if so how compatable is it, how much extra does it cost to get it?

HOLGER SOMMER on 03/12
Frank, there is a board which goes in the SE. It allows you to run DOS programs. Its around $1000 and comparable with a IBM XT Clone. I looked in the possibility to put a Clone card (AST) into my MacII but heard bad reviews and decided to by a Clone and connect the Mac with the clone using MacLink.

JOHN PAFF on 03/14
The slowness of the AST board is a bit more complicated matter. The board is NOT slow in processing - actually it's a bit faster as a number cruncher than the 8 Mhz AT. It is strictly in graphics—translating IBM to Mac screens that the slowdown occurs. For things like Lotus, the board is fine... for graphics oriented programs, forget it. However, AST says they will be releasing new drivers, which will so increase screen handling speed that it will solve the graphics problem. We'll see!

MARC WEINBERG on 03/12
Last weekend, I had a new fan installed at Clinton Computer. Its an Apple upgrade which cost about $84 in all. It's the best investment I ever made! Now I can hear my radio and all the strange noises that my disk drives and hard disk make! It's just terrific. They also put in a new video board because the old one was too big with the new fan. The fan now is round like a regular fan and not shaped like a barrel laying on its side. Buy a new fan, it's worth it. One more thing. You know about the screen shimmering and jumping on the left side? The phenomenon that Apple says doesn't exist! Well, my screen now is rock stable with the new fan. The old fan really screwed it up. Run don't walk to Clinton.

JOHN BJERKE on 03/27
I am relatively new to the world of Mac. After 3 months of flawless service my Mac II is acting up. Two out of every three "Restarts" are failing. The system hangs at the "Welcome to

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Macintosh" box. Only considerable playing with the reset switch will get it going. Is the hard disk (Apple 40 meg internal) in trouble? Should I reformat? The problem began just after I used Sound Mover (WAP Mac disk 20.08) to add some beep sounds. I could also use advice on managing sound on the II.

BILL BALDRIDGE on 03/27
You have entered the "Twilight Zone"—mucked with Mother Mac. Anytime you start adding "nifty" gimmicks like beep sounds and "freeware" (or betaware for that matter) to your hard disk, you are risking problems. I would highly suggest you go back to using a standard System Folder, using Apple released files and commercial software add-in's only. If you use your Mac II in business this applies in spades. Playing around on the Mac can be a lot of fun, what with beep sounds, Mooses, and all the nifty INITs out there... Just realize the risks, and BACK UP! before mucking about!!

JOHN BJERKE on 03/28
Thanks for the tips. I junked my system folder and started over and that seems to have helped. Yesterday's encounter with the sound mover is the second bad experience I've had with these programs. Both programs purported to work with the Mac II. I must have missed some subtlety in using them. Does anyone have any experience with MacRecorder from Farallon. It is supposed to digitize and move sounds—I can live without funny beep sounds, but I really want to get some sounds into a HyperCard project.

BILL BALDRIDGE on 03/30
Paul Schindler demo'ed MacRecorder on the Computer Chronicles this past Saturday. It apparently comes with a HyperCard utility to directly import sounds to HCd. He was running it on a Mac II, so I guess you can take that to the bank... Enjoy! BTW, he really hammed it up by recording his normal sign-off with MacRecorder, and then had it play back...miming the first part, and then drinking a glass of water the last few seconds. I'll bet that MacRecorder will sell more than a few MacII's just on that single demo! My sister-in-law, a big blue fan, was floored when I took HCd over and had it speaking and doing animal sounds (I collect sounds). She turned to my brother and said, "Can't an IBM do that?" To which my brother just shook his head... I LOVE IT!!

The Mac Fed SIG

JERRY WALZ on 03/11
What's out there among the FEDSIG members as far as people/offices that have developed various versions of Federal forms for use on the Mac?

GEORGE M. LEWIS on 03/13
The most elegant implementation of forms creation I've seen yet is TrueForm by Spectrum Digital Systems. A lawyer friend of mine helped them by beta testing nearly two dozen versions while it was under development. It's a bit pricey, but a great solution to forms creation on the Mac. It involves a 3-step process: 1) scanning a form to create a digital image of it; 2) opening the form with TrueForm to set up data entry fields—you specify the area of each field, type of info. to be input in each field—Xtes, names, amounts, etc.; links between fields (if any); math operations on data, etc.; and 3) use the form to create filled-in records. Spectrum sell complete systems including software and scanners, or their software separately if you already have a scanner. It works great, and with a laser printer the reproduced forms look just like the original.

JERRY WALZ on 03/14
I need to make some viewgraphs on a LaserWriter. Is there any special material that should be used? Will regular acetate type sheets used with a Xerox work? The Varityper salesmen said to use only teflon material on their 600dpi printer. Is that needed for an Apple LW?

DAVE LAVERY on 03/16
We have been using the transparency film from 3M to make our viewgraphs for some time now, and have never had any problems. It is 3M #154 trasparency film, order #78-6969-6085-1, which is specifically made for use with laser printers. It can be found at either Penn Camera on 9th Street NW, or Visual Systems over near Farragut Square (plus a lot of other places, I am sure). The film can be either manually fed or placed in the LaserWriter paper tray, with no feed problems or jams. Works great!

SOFTWARE UNDER REVIEW

The following items have been received for review by the Washington Apple Pi.

Product	Reviewer	Date Received
Training Tapes (Excel, Word, Works)	Patricia Kirby	12/87
Word Finder	David Gursky	11/87
Coach Professional	David Gursky	11/87
LookUp	David Gursky	11/87
AEC Information Manager	Steve Hunt	1/88
Cricket Graph 1.2	Frank Potter	2/88
True Forms	Phil Noguchi	1/88
Award Maker	Judy Spitman	9/87
Jeff Schiller	AutoSave DA	2/88
Illustrator	Lynn Trusal	11/87
LaserPaint	Lynn Trusal	11/87
Plain(s)? & Simple Acctng.	Ed Myerson	12/87
Wall Street Investor	Don Landing	2/88
Map Maker 3.0	David Morganstein	3/88
QuickDex	Reviewer needed	
QuickFolder 2.0	Reviewer needed	
MacFlow	Reviewer needed	

If you would like to review any of those listed above with reviewer needed, contact David Morganstein (301) 972-4263. The job of the reviewer is to complete the review in a timely fashion, submit it to the Journal for publication, and mail a copy of the published review to the software vendor for comment.

THE LOWDOWN ON /// SIG DISK 1002

by Dave Ottalini

Our newly reorganized PD disk 1002A/B contains a lot of great Business Basic utility programs that should come in handy whether you're just learning how to program or if you have been using the language for a good while. You GS Basic users may also find some useful routines you can adapt for your own purposes. This disk contains programs from the old 1002 disk, as well as programs from disk 1003. In addition, we've added a few things, subtracted some others and thrown in our newest version of Menu.Maker (3.0) as well. The disk is self-booting on side one and includes all the assembly language Invokable Modules needed by the programs to run properly.

We've also placed the programs in subdirectories due to their large number, and tried to group them logically under each subdirectory. With those comments, here's an explanation of what's on the disk:

Side One (1002A)

Utils.1

-Epson.Select will let you set up your Epson printer before printing. Epson.Document tells you how.

-File.Reader allows the user to read a text file from various sources and even print it.

-Hex.Dec.Convert will convert Hex and Decimal numbers back and forth.

-Mortgage will compute your mortgage payments over any specific period of time and any given amount.

Utils.2

-Contains a number of Basic menu programs including: Automenu, Basic.Bootprogram, and Manualmenu.

-Compare.Utility will compare two versions of a Basic program (saved as ASCII files) and will show you the differences. Compare.Documnt tells you how to use it.

Utils.3

-Scroller will load an ASCII file and allow you to scroll through it both up and down, left and right.

-Textfile.Copy allows you to copy text files from one disk to another.

-Textfile.Dump is a similar program you can use to print a text file to a printer or to the screen.

-Textfilemaker allows you to create a textfile and save it to disk.

-Search.Utility will search a text file for specific strings (lines) of copy. Search.Document tells you how to use it.

Utils.4

-Mailbase is a Basic data base you can use for keeping mailing lists.

-SOSBUFFER.DEMO needs a printer to work, as it demonstrates the typeahead feature of the ///'s operating system.

Side Two (1002B)

Utils.5

-Includes two files, Util and Util.Doc. You can add this program to other Basic programs, to do a number of disk utility functions, including copying files, reading files, etc. Check the Util.Doc file for how to use this program.

Util.6

-Basic Renumber allows you to renumber any Business Basic program easily and quickly.

-Diskdrv.Clean will turn on the desired disk drive so that you may use commercial disk cleaning kits.

-Find.Replace allows you to find specific strings of text and replace them.

-Compress.File is a short program that compresses a text file to save space on disk.

-REM.Remover does just that in a Basic program (REM statements slow down programs)

-Renumber.Doc is a basic program that documents and works with the Renumber.Inv invokable module.

-Demo.Three is a fun little program that you'll enjoy and could serve as the basis for a "Hello" program.

-Modem is a telecommunications program written in Basic. Easy to use.

-Rename.Direct allows you to shorten file names prior to backing up and will restore the names as well.

Util.7

-Line.Printer is a Basic routine that will print the first 23 lines of the screen to a printer.

-S.T.E.P. is a fully-functioning word processing program written in Basic.

-VC.File.Printer is a Basic program that will print Visicalc (DIF Format) files to a printer.

-Newdownload allows you to change fonts in Basic easily and quickly.

-Cipher.Utility will encrypt a text file and restore it. Cipher.Document explains how to use it.

Util.8

-Graph.Pac is a Graphics Drawing program.

-Time.Program works if you have a clock chip and will display the time on your Apple ///.

-Loan.Pay.Calc will help compute your loan payments over any given time.

-Border.Program can be added to other programs to create a nice border ala the Apple /// demo disk.

-Calculate.Area will do just that.

-Graph.Plot will plot graphs for you.

-PDL.TEST can be used with an Apple /// joystick to make sure it is aligned properly.

You will be able to run any of these programs from within Menu.Maker. But they HAVE NOT been set up to return you to Menu.Maker after being run. The quickest way to get back is simply type at the prompt)Run .D1/Menu.Maker and you'll be set.

These programs are useful not only in themselves, but also when used with other programs. For novice programmers, they also provide excellent guidance to show how the language works and can be used to enhance any Basic program.

MAC DISKETERIA NEWS

by Dave Weikert and Marty Milrod

HyperCard Ver1.1

Washington Apple Pi has received permission from Appple Computer to distribute the HyperCard™ upgrade to owners. The upgrade is available as a single 800K disk for the usual price of $5, or $4 when bought with other disks in quantities of 5 or more. You must show proof of HyperCard ownership when you order, which may be the original disk, a receipt that shows HyperCard purchase, or a copy of the first page of your HyperCard manual (the one titled "HyperCard User's Guide).

800K Format for New Mac Disk Series

We have been issuing Mac II and StackWare disks in the 800K format since these programs cannot be run on Macs with 400K drives and the older ROMs anyway. We have decided to change to the 800K format for the remaining disk series as well. The direction of Apple Computer and the majority of the Mac community is to the 800K format. Many newer programs are now larger than 400K or require the 128K or 256K ROMs for efficient operation. A straw poll of the members present at the general meeting in March disclosed that most members present either possessed or had access to 800K drives.

For a limited time, we will provide access to the 400K format for those of you with the older machines. You will have to special order the disks and we will add a surcharge of $1.50 per order since two disks would be required instead of one. Some disks will not be available in 400K format at all. For example, programs that take more than 380K of disk space will not be available nor will StackWare and Mac II series. In the meantime, we recommend that you check with our advertisers who are Apple dealers to determine the price of an upgrade to 800K disk drives and the newer ROMs. Don't forget to inquire about discounts for Pi members.

Miscellaneous Utilities Series Available

I would like to welcome Dave Condit to our staff. Dave volunteered to help with disk annotation and he and William Jones have completed the assembly and notation of the seven Miscellaneous Utilities series, disks 15.01 through 15.07 which are being released this month. The Miscellaneous Utilities have been arranged alphabetically. The seven 800K format disks are available at a package price of $24.50; the series is accompanied by a mini-catalog with program notes and catalog listing. Disks in this series may also be purchased individually without the catalog at the standard price of $5 each or $4 each when five or more disks are purchased. Unlike earlier series, we have not simultaneously released disks which contain only the new programs or updates not previously issued since these disks are all 800K format and the majority of the programs are either new or updates of programs previously issued. The remaining Utilities series are currently being assembled and tested by our volunteer staff as follows: Bob Tobias—Programmers/Hackers Utilities and Charles Redmond—Word Processing Utilities.

And Now, Here Are the Disks...

This month we are issuing ten disks, seven disks in the Miscellaneous Utilities series , two new disks in the Mac II series, and the HyperCard upgrade. This month's submissions are brought to you by Dave Condit, Rick Chapman, Marty Milrod, William Jones and Dave Weikert, and the efforts of all the duplicators listed under the masthead. The folder information, where appropriate, precedes the listing of program contents. Folder information is underlined, programs and files are printed in bold with shareware information printed in bold italic print.

Mac Disk 15.01: MU 1 - Miscellaneous Utilities

AlbumTracker 2.0 f: **AlbumTracker 2.0:** Allows you to catalog by 42 different fields your entire (max 1054) record, compact disk or cassette collection. As many as 8 icons can be associated with each entry by specifying the icon name in any field. Use the **Sample Collection** to see how the program works. Help is available under the Apple menu. ***Shareware—What you feel it's worth.***

Amortize 2.3 f: **Amortize 2.3:** Create schedules of amortization for your loans with this simple utility. Tell the program the amount of the loan, the number of payment periods, and the interest rate, and it will create a table with columns showing the amounts of your payments, divided into interest and principal. It also shows the remaining balance at each period and the total interest payments over the life of the loan. The program can also be used to calculate retirement income from investments. **Amortize 2.3 Doc** is the documentation. ***Shareware—$15.***

BinHex v5.0: Latest version of the **BinHex** utility to convert applications to and from hexadecimal format from the binary format used for disk storage on most non-Macintosh computers. Especially useful if you transfer files directly from other computers in binary. ***Shareware—$10.***

Binomial Sums: This program computes the sums of binomial probabilities using a recursive algorithm that allows rapid and accurate computation even for extreme values of the parameters.

BiPlane1.0 f: **BiPlane 1.0:** This is a full featured shareware spreadsheet program. It consists of two components: a desk accessory and a regular application program. BiPlane worksheets are compatible with worksheets developed using other spreadsheet programs and saved in SYLK format. Although BiPlane does not support the full functionality of other spreadsheets, it does support the most popular and commonly used features including 32 of the most used functions. The application's spreadsheet size is 1000 rows by 1000 columns versus 255 rows by 255 columns for the desk accessory. Individual cells can be formatted by size, font and style . **BiPlane 1.01 DA** is the Desk Accessory version of the spreadsheet and **Intro to BiPlane 1.0** is the documentation/introduction to the spreadsheet. ***Shareware—$40.***

BlowUp 3.0: This application enlarges a MacPaint document by a factor of two. It creates 4 MacPaint documents for every MacPaint document it opens. Great for posters. ***Warning:*** **BlowUp** only works with system 3.2/finder 5.3 and earlier system versions. ***Shareware—$5 or two disks.***

BusinessLog f: **BusinessLog:** A Macintosh login program that is a take-off from "Autolog" (Jan Eugenides, *NIBBLE MAC*, Vol 1, 1985) and it contains several features that will be of great utility for the user who wants to keep track of the time of computer use for specific jobs, job categories or users. One of the distinguishing features of BusinessLog is the capability of flagging a particular session as being business-related or non-business-related. **AutologConvert** is the conversion program

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to convert from the Autolog program to BusinessLog. **BL Docs** is the standalone documentation for the program, and **Business Log Docs.txt** is the text file required for the help feature. ***Warning:*** do not change the name of Business Log Docs.txt.

Calendar with notice: This program prints a full page monthly calendar with your own annotations for each day. You can change the fonts and style of each part of the calendar and in high quality this is an excellent full page calendar. Graphics are not supported. ***Shareware—$10.***

Camera(HFS): This application demonstrates the impact of different settings for your camera under different lighting conditions. You can change the shutter speed, the aperture and the film speed and see the effect on either a normal or negative photographic image.

Card File 2.01d *f:* **Card File 2.01d:** This is a demonstration version (limited to 25 cards). Card File is meant to be a personal index file type database, and can serve as a 'bridge' between other Macintosh programs. Each card can hold up to 400 characters, and display up to 10 lines. The idea is to move a mailing list or address book into Card File, where the information is easy to handle quickly. It should be pretty simple to move records from most other programs to Card File. **CF Demo Doc** is the documentation for the demo version. An **Order Form** is included to order the full capability version. ***Shareware—$20.***

Mac Disk 15.02: MU 2 - Miscellaneous Utilities

Cat•Mac™ *f:* **Cat•Mac:** A "TeaseWare" version of a good cataloging utility. **Cat•Mac** will catalog the files on all your disks, creating listings showing type of file, file name, volume name, modification date and time, and file size. The program allows sorting by the various categories, as well as rearrangement of the columns of information. You can save the listings as a text file (with data separated by spaces, tabs, or commas) so that the catalog information can be exported to your favorite data base or word processing program. The "Level 1" version of the program provided here is limited to 1,000 files. Level 2 allows 10,000+ files and includes other features not found in Level 1. The $10 "TeaseWare" registration fee gives you a credit toward purchase of the Level 2 program. **Cat•Log™** is a demo catalog listing and **Scrapbook File** is accessible within the Cat•Mac application that contains information on some "Hidden **Cat•Mac** Power Tools" and on how to register (including a mailing label, so you'll have no excuses for not paying your fees). ***"TeaseWare—$10.***

Checkroom *f:* **Checkroom:** Checkroom is an INIT that will make Suitcase™ display its icon on bootup once it is installed into Suitcase™. However, the process for installing it is a little involved. **Checkroom Documentation** is the documentation and instructions for installing the INIT.

CK 2.0 *f:* **CK 2.0:** This super-handy gem of a home checkbook expense tracking utility keeps a record of Categories and Entries and excels in keeping your checkbook in balance. Category information includes the Name and Type (credit/debit) of the category as well as optional Auto-Payee and Auto-Amount information. Entry information includes Payee, Date and Amount and may also include optional Check Number and a Memo (text) field. Each Entry also has two attributes, posted and locked. **CKhelp** is an on-line help screen available under the Apple menu that describes the program and its main features. **CK2.0 Docs** briefly describes the program and **SampleCheckBook** is a sample file for testing. The manual you receive when you send in your shareware fee looks as if it has been professionally prepared in the style of the best Macintosh documentation. Fernando is a member of the Pi, so don't forget those shareware fees. ***Shareware—$15.***

Clarity: Eliminate the "jaggies" that occur when you send a bit-mapped 72 dots per inch (i.e., MacPaint) image to a printer that prints at a higher resolution than the application produces. Bit-mapped pictures are scaled to the resolution of a LaserWriter or ImageWriter printer. You can copy a file to the clipboard and then switch from your bit-mapped application to Clarity under MultiFinder or Switcher or you may paste the copy from the application into the Scrapbook and then "clarify" it. ***Shareware—$8.***

Converter: Use to strip or change characters or sequences of characters in any file. This program filters up to 32 different characters or character sequences at a time, converting the file to text file after conversion. More complex to use than Macify 2.5 but does things that Macify does not. An Austrian program with a shareware fee that seems somewhat steep. ***Shareware—$75 US.***

DesignerDraw: DesignerDraw is a specialized drawing program for creating dataflow diagrams, structure charts, flow charts, and other types of diagrams which mainly consist of boxes containing text and lines connecting the boxes. Such diagrams can be drawn and modified faster and easier with **DesignerDraw** than with generalized object-oriented drawing programs. This is version 1.0; when you send in your shareware fee you get version 2.0 which has several enhancements. ***Shareware—$45.***

Disk Librarian v1.82a *f:* **Disk Librarian v1.82a:** This is the shareware predecessor of the commercial program DiskQuick™ ($49.95), and is an excellent disk cataloging program which allows you read the directory on a disk, to sort your files or disks and allows you to view the catalog in many different ways. It even shows the comments in the Get Info windows. It can be used with hard disks as well as floppies, and offers information on the size of folders, content, and date last modified for each file. Scroll bars make review easy and the program will run as long as you provide disks. **Librarian 1.82a Doc** is the documentation. ***Shareware—$20.***

Elapse 2.0: This program tells you how long your Mac has been on since it was last started up or booted. ***Shareware—$1.***

Mac Disk 15.03: MU 3 - Miscellaneous Utilities

Exchequer *f:* **Exchequer:** This is a demonstration version, 5 employees vs. 100 employees, of a full scale payroll program. **Exchequer** will work with salaried or hourly wages; calculate Social Security (FICA), state, and federal taxes; calculate overtime pay using the time-and-a-half method for overtime hours; print a multitude of reports including, payroll checks (using NEBS form 9000-1 from New England Business Services), a payroll register for the current payroll period, current earnings and withholdings totals for all active employees, a quarterly earnings report, and totals for W-2s. **Exchequer Manual** and **Exchequer Manual pt.2** is the documentation for the program. ***Shareware—$50.***

FootBall Picks *f:* **Football Picks:** This program is a working demonstration version of the soon to be released shareware program **Football Picks**. It can keep track of individual player bets on NFL Football, and allows you to "run the office pool." It allows the use of spreads in determining the winners, and the winner is based on the player with the most number of correct picks (with the spread) out of all 14 games. The total amount of points scored on the Monday night game is used as the tie breaker. **1987** is the schedule information for 1987 that will

contd.

give you an idea how the program works. **Football Picks.Docs** is the documentation for the program.

GrafIt ƒ (Reqs Basic): **GrafIt:** **GrafIt** requires Microsoft BASIC (the interpreter) and is one of those programs written to save a little time. All there is to do is plug in a single variable function, in the MS Basic List window, and **GrafIt** will graph the function. You can print the graph or copy it to the clipboard for enhancement in another application. **GrafIt Docx.txt** is the documentation.

Graphical Sort 2: This program is a simple sort program offering five different ways to sort a randomly generated set of numbers, except that instead of sorting a boring list of numbers the author has represented the numbers as lines or points and as the program sorts the array it redraws the representations on screen.

ham radio utilities ƒ: **ham radio utilities:** Jim Sohn, a member of the Washington Apple Pi and ham radio operator with call letters WA4DGB, sent us these utilities that he developed. This is a nice collection of utilities that solves some of the many engineering equations necessary in constructing and operating a ham radio station. Three of these programs are written in compiled BASIC by BASCOM and three are compiled with the ZBasic compiler, so they all are stand alone applications. The two that have a suffix notation "Talk" require MacInTalk which is included on this disk.

Construction: Computes the materials needed for the stone base and for a concrete slab given the length, width and depth of either the base or the slab.

Decibels: Computes decibel ratios for power, voltage and current values; ratio conversions for W-dBW, W-dBm, mW-dBm, dBm-W and dBw-W; and power/voltage/current gain numerical ratios. (If you have to ask what decibel ratios are, you don't need to know.)

GreatCircle: Computes the bearing and distance (in Nautical miles) between any two points specified by their longitude and latitude.

HamRadio: Computes transmission line attenuation for quarter, half and balun configurations. Calculates antenna construction parameters for specified frequencies. Lists power supply characteristics for different configurations such as full and half wave. Performs range and bearing calculations like the GreatCircle program.

HamTalk: A talking introduction to the HamRadio file preceding.

LineLoss.Talk: Computes IR loss in a specified length and gauge of wire with a specified current flow.

Histogram Maker 1.1 ƒ: **Histogram Maker 1.1:** This will take numerical data from a text file and creates a histogram display which can be moved via the clipboard to another program (like MacDraft or MacPaint) for printing. (A histogram is a plot of the number of occurrences of each of the numbers in the text file over a specified range of values.) ***Shareware—$10.***

Mac Disk 15.04: MU 4 - Miscellaneous Utilities

Household Shopper: Allows you to generate and maintain "shopping lists" for up to 40 categories and up to 40 items per category. An item includes name, brand, quantity/size, need to buy and coupon availability. The list may be sorted and printed. ***Free; $5 for Pascal source code if you supply disk, $7 otherwise.***

Icon Collector ƒ: **Icon Collector:** First the America's Cup, and now this! An Australian import that lets you collect and inspect your full collection of icons. We've provided an assortment of icons in files to start you off. Check out the slideshow feature! Includes the following **Icon Collector** files: **Faces, Magic, Movies, WAP Lib Icons.** ***Shareware—$15 (which currency, they didn't say.)***

INFOMaker v1.80 ƒ: **INFOMaker 1.80:** Format data from other computer systems (PCs, mainframes, etc.) or from other Macintosh™ applications. Places all fields of a record in order on one line, separates them with tabs, strips control characters and leading and trailing spaces, inserts information for missing data, removes any unwanted data, and sets the file CREATOR so that the data can be loaded directly into an application. Can also be used to split files on record boundaries and recombine or append files. ***Shareware—$14.50 each plus $1.50 each for shipping and handling.***

Inventory: Do your household inventory with this program. It has many features which allow you to organize your inventory. Program bombs under current Systems 4.2/4.1/4.0 and Finders 6.0/5.5/5.4 but works under earlier ones.

Label Manager 2.0 ƒ: **Label Manager:** Allows you to conveniently maintain a database of mailing labels. The number of labels may vary from a few to a mailing list consisting of thousands. Label Manager is flexible; it supports any printer, label "formats" which describe the size of labels and their layout on the page are user definable, labels can be printed in any font and font size, you can print one label at a time or thousands all at once, and Label Manager allows you to import data from other databases as well as exporting data to them. **Sample Labels** is a sample label format and **Label Manager Docs** describes the programs and the user definable options. ***Shareware—$15.***

Labelprinter: Prints standard mailing labels from a text file of addresses.

Lister: Prints text files in an attractive page format with a standard header and footer and a page border.

Mac a £oan: Calculates details of a loan from input information such as loan amount and interest rate. Doesn't provide for printing, but screenshots will capture the data.

Mac Mailing 2.0S ƒ: **Mac Mailing 2.0S:** A simple system for mailing labels which will handle up to 25 entries per file. The **Mac Mailing 2.0-S Doc** briefly describes the operation and features of Mac Mailing. The **Convert** utility converts files from the old Mac Mailing 1.X format to the new format. ***Shareware—Free for this 25 entry limited version, $20 for a version capable of 2500 entries.***

MacLinReg: Plots the linear regression and produces the statistics and equation of the set of data points. The data points may be entered in the application or imported. The data and the plot may be printed, the data may be saved and the plot may be copied to the clipboard. ***Free; $8 for source code on disk (MS BASIC).***

Mac Disk 15.05: MU 5 - Miscellaneous Utilities

Macload: Allows text files up to 32K to be entered into the Mac through the modem, as from, say, a laptop computer.

MacMeasure ƒ: **MacMeasure:** In conjunction with a digitizing tablet, allows measurement of areas, perimeter lengths, lengths, relative distances, and coordinates of objects in photographs. Results can be listed on the screen, printed, or saved to disk for later analysis by other programs. **MacMeasure.help** and **Measure Help(MacWrite)** are the help files. **MacMeasure.pas, measure.rsrc,** and **TextToHelp.pas** are supporting files for the programmers out there.

MakePaint: Creates MacPaint documents from PICT type files or resources from the clipboard. Can also be used to cut, clear,

contd.

or invert sections of the MacPaintings.

MedConvert f **MedConvert:** A fancy "filter" program which loads a text file created from a Medline (National Library of Medicine scientific database) search into memory, strips out unwanted characters, and adds the appropriate field and record delimiters so that the resulting output file can be read (or imported) by a database program. **MedConvert doc** explains how to use it.

MessageMaker: A telephone call slip application; also allows creation of day plans and notepads.

MetroGnome1.03 f: **MetroGnome1.03:** Plays a timed tempo or an entered beat, compiling the frame count or beats per minute.

Numberer: This program permits you to add line numbers to the beginning of each line of a text file.

Oddsmaker 1.0 f: **Oddsmaker 1.0:** A football handicapping program for the NFL. The **1987 Season** is the team schedules and the **Read Me First!** is a brief text file describing Oddsmaker's features. ***ShareWare—$20 (Will receive another program; can get '88 season file for $5).***

Pad Design: An aid for designing electrical attenuators (pads) for T- and H-Pads and for π- and 0- attenuators. Calculates resistor values for input and output impedances and attenuation specified by user. ***Shareware—$5.***

PaintMover: Bill Atkinson's full page MacPaint paste up application. It allows you to work with sections as large as a whole page. You can enlarge, rotate, and smooth as well.

PicSynch f: **PicSynch:** Use PicSynch along with your sound and paint files to put on a show. Use SoundWave edited files only. **PicSynch Instructions** is the documentation. **PicSynch.Pic** and **PicSynch.Snd** are supporting (example) sounds.

Mac Disk 15.06: MU 6 - Miscellaneous Utilities

Pro Football Pool v 1.01 f: **Pro Football Pool v 1.01:** While not advocating any illegal activities, if you want to run your own football pool for the 1987-88 season, this program is for you. Up to 100 players may participate, each one picking the winners in each of the 14 games each week. You print the pick sheets, collect and enter the picks, enter the winners and print the results. There is a tie-breaker feature that limits the number of winners each week. information describes the procedures for it's use and the limitations of the program. ***Shareware—$15.***

Quick File f: **QuickFile:** This is a little database by Bill Atkinson that is an early ancestor of HyperCard. (Was first called "Rolodex" until the trademark police complained.) Great for telephone directories and address listings. **QuickData** is the file where QuickFile keeps data. It contains the instructions for using QuickFile on the first 11 cards.

Reminder™ 1.01 f: **Reminder™ 1.01:** Application for displaying a short reminder message upon bootup when it is set as the startup application using Set Startup. It is invisible to the user except when a message has been posted for display. **READ THIS FIRST!!** is the brief documentation. ***Shareware—$5.***

RLE/Paint 0.2 f: **RLE/Paint .02:** A utility for converting MacPaint pictures into RLE format, a graphics interchange standard used by CompuServe. This documentation describes version 0.2, a pre-release version meant to get ideas and comments from users for the real release.

Rolodesk: A card-file style Rolodesk program. Includes utilities for converting between Rolodesk files and Quickfile and MacWrite files. Information is located in the "About Rolodesk" under the Apple menu and in the "Rolodesk Help" under the Utilities menu.

Scheduler: A daily schedule program. It permits to entry of the starting and ending dates for the week, and allows notations in increments of 15 minutes starting at 8:00 A.M. The schedules can be printed.

Scroll Paint 1.0: With this application you can save several Paint documents in the Mac's memory and scroll through them on the screen continuously. A scrolling slide show.

Shopping Helper f: **Shopping Helper:** This MS BASIC program permits you to make up a shopping list based on a user modifiable list. Not as comprehensive as the Household Shopper on a previous disk in the Miscellaneous Utilities Series. **GroceryList** and **MasterList** are the supporting files and need to be in the same folder as MS BASIC.

Slicer: Divides and restores text files.

SmallView 1.2 f: **SmallView 1.2:** A calendar program that allows you to write, display and print notes and memos through the year 2039. Smallview can generate a month-on-a-page calendar for any chosen year between 1904 and 2039 along with personal notes and 14 major holidays. **Smallview doc.wrt** describes the program. ***Shareware—$12.***

SortDemo: Demonstrates the sorting of data using various sorting schemes. ***Shareware—$5.***

Stuffit 1.30 f: **Stuffit 1.30:** Permit grouping of multiple files into one ("archiving") and the compression of file(s) to reduce download time and hassle. Based in part on the IBM program Arc and in part on the UNIX program CompressIt. It is appreciably faster and more efficient than PackIt and has built in utilities BinHex4 .Hqx encoder/decoder and a built-in file segmenter/ joiner. Offers compatibility with PackIt II/III by unpacking .pit files incorporating the unpacked file(s) into a StuffIt archive. **StuffIt Documentation** tells all about it. **SIT 1.30 Update Notes** provides the latest information on changes since version 1.20. Use StuffIt for de-archiving/ decompressing files for free. ***Shareware—$18 for other use, $2 extra for disk of latest version.***

Talk Alarm: A talking alarm clock. Requires MacInTalk to provide the voice.

Tape Labeler 3.0 f: **Tape Labeler 3.0:** A real winner for tape cassette fans. Prints professional looking cassette labels on the ImageWriter or LaserWriter. There is space to type two artists, two album titles and 30 songs, plus noise reduction mode and recording dates (for each side of the tape). Specify the tape length, bias/equalization, tape brand and tape type, a catalog number and a distinctive Identification pattern. Even prints in color. **Tape Labeler 3.0 Doc** describes the features and how to customize it using ResEdit. ***Source code (with comments) in ZBasic, $15 and a blank disk.***

TellerPhone 1.0: Convert your telephone number into the equivalent letters on the touchpad. Type in your number, and the program will show you all the possible combinations. (Did you know that the Pi TCS number is Yum Tuk? The zeros don't count.)

Mac Disk 15.07: MU 7 - Miscellaneous Utilities

TenTabSpread v1.0 f: **TenTabSpread v1.0:** Written to make easy work of some periodic household bookkeeping tasks, mainly at the end of the year. What did you pay for phone bills, electric bills, Heating and cooling, trash hauling, house repairs, car repairs or whatever? Household bookkeeping is just for example. Actually, it's useful to analyze any of a number of sets of household and business figures using this method. **TenTabSpread v1.0 Docs** describes how to use it and some

contd.

anomalies in the program. *Shareware—$12.95.*

TrackSheet™ 2.1d f: **TrackSheet™ 2.1d:** An application written for use in multitrack recording studios. It is intended to alleviate the bothersome paperwork involved when recording on 8, 12, 16, or 24-track recorders. This demo version of TrackSheet™ 2.1 has certain features disabled which will not prevent you from seeing what this program can do. The disabled features are: all print functions; all file-saving functions and saving of new menu configurations. **TrackSheet docs** explains how to use it. **TrackSheet example file** and **trackd.mnu** are supporting files. **Shareware—$45.**

TriGrapher f: **TrigGrapher:** An MS BASIC program that allows you to enter up to two equations in the form y= (i.e., y=x^2+2*x+3). The program will then graph the equations on the screen according to specifications you select. Requires MS BASIC. *Shareware—$5.*

View Paint 1.5: This application permits you to easily preview any file that is in the MacPaint format.

Wildpad_I/II f: **Wildpad_I, Wildpad_II:** Use with a Summagraphics™ 12" x 12" Mac Tablet™ to digitize data points from graphs, charts, and photographs placed on a digitizing tablet and to enter the values for these points in a standard text file which could be read by text editors, word processing programs. It will integrate lengths and areas and place these values in the output file. You can set the scale of a graph being digitized and use either Cartesian or polar coordinates. Wildpad will automatically correct if the graph taped to your digitizing table is tilted with respect to the baseline orientation of the tablet. Finally, the program will return to the first point and digitize it for accurate integration and will find the center of mass of a region. **Wildpad Doc.** is a brief MacWrite file describing Wildpad. *Shareware—$40.*

YOAP: This admirably simple program needs little explanation. When opened, it allows you to print a Year On A Page calendar. The program apparently doesn't depend entirely on the Macintosh calendar, because it will go beyond the 1904 - 2039 range.

Mac II Disk 20.09: Miscellaneous II

QuickerGraf f: **QuickerGraf:** This is a system INIT file by Andy Hertzfeld that will speed up certain 8-bit screen graphic operations. The program works by intercepting certain QuickDraw calls and substituting its own faster routines. If you work with 8-bit graphics on your Mac II, this program is a must. Just stick this file into your system folder and reboot.

QuickBenchMark: This is a short program which benchmarks the gains from using QuickerGraf.

MaxWrite .970 f: **MaxWrite .970:** The first color word processor for the Mac II! A very nice word processor that works in full color on a Mac II. The program will print to any Apple printer and will even print in color on an ImageWriter II. **MaxWrite Info** contains the instructions for using MaxWrite. *Shareware—$30.*

Color Icon f: **CIcon:** A program for creating color icons on the Mac II. It will only work with 16 colors, but it still makes nice looking icons. **CIcon Edit Docs** is the documentation for CIcon.

BeepSounds f: More beep sounds for the Mac II. These include **applause, beethoven, firebird, hallelujah, hey, ni, noces, ping,** and **startling chord.** Use ResEdit or another resource copier to place these files into your system file. Then use the control panel to select the desired sound.

Vaccine: A system init that provides some protection against viruses. Place this file in your system folder and reboot.

Zoomation: Yet another program for creating pretty patterns on your screen.

MegaBrot: Another program for drawing fractals. This one draws the Mandelbrot set. It features support for the Megagraphic's Mandelbrot Engine, a Mandelbrot generation card for the Mac II (although the card is not required). Requires 8 bit video.

Screen-Dump][: This program will install any of four different F-keys for the printing and saving of Mac II or other large screens. This very useful program is an update of version 1.0. *Shareware—$12.*

Colorize v2: The latest version of an application to colorize other applications. This program is not Multi-Finder compatible.

Round Earth Idle: This program puts a spinning globe up on the screen. A nice demo of both round windows and background processing under Multi-Finder.

StartupScreen: A fun startup screen. Just place this file in your system folder and reboot.

Mac II Disk 20.10: Image .61

This disk contains Image .61 and some associated files. Image is a public domain program written by WAP member Wayne Rasband. It can be used for acquiring, enhancing, analyzing, editing, and color coding gray-scale images on the Macintosh II. When complete, it will perform standard image analysis techniques, including densitometry and morphometry. It can currently do histograms, contrast enhancement, density profiling and digital filtering. It also provides many MacPaint-like editing functions, including the ability to draw lines, rectangles, ovals and text. Objects may be drawn either outlined or filled, in any of 256 colors or shades of gray. An earlier version of Image was released on Mac Disk #20.08. This version is much improved although it now requires a Mac II with at least 2 megabytes of memory and an 8-bit video card capable of displaying 256 colors or shades of gray.

Image .61B: This application requires at least 2 megabytes of memory and an 8-bit video card. (If you only have a 1 megabyte Mac II you should stick with Image .35 on Mac Disk #20.08.) By way of warning, the program will require up to 4 megabytes when using the animation procedure. If you want to try out the animation examples, you must first increase the memory allocation of Image. To change the memory allocation, go to the Finder, select the application and choose Get Info. The memory allocation can then be set by entering the new allocation within the Get Info dialog box. Documentation for Image is included in the text file **About Image. Caution** and **Frog** are two images in the form of PICT files that can be opened by Image.

Turbo Pascal Source f: **Image.pas** and **Image.rsrc:** Complete source code and the resources associated with Image.

Palettes f: Seven different gray scale and color palettes for use with Image. Includes: **4 Grays, 8 Grays, 32 Grays, 12 Colors, 16 Colors, 32 Colors,** and **Colors(Default Palette)**

Bird Movie f: Seven animation frames of a bird in flight. Open these files in order from within Image to view the animated sequence. Be sure to increase the memory allocation of Image prior to trying to open all of these files simultaneously.

Molecule Movie f: Eighteen animation frames of a molecule rotating in space. Open these files in order from within Image to view the animated sequence. Be sure to increase the memory allocation of Image prior to trying to open all of these files simultaneously.

WASHINGTON APPLE PI DISKETERIA MAIL ORDER FORM

This form is only for ordering disks that you want mailed to you.
5 1/4" Diskettes: - Members $ 5.00 each; Non-members $ 8.00 each, Plus $1.00 each postage up to a maximum of $ 5.00.
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A $1.00 per disk discount on the above prices is offered for orders of 5 or more disks. Postage remains as above.

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( ) 43 IAC 29 Utilities H
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( ) 45 Diversi-Copy
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( ) 47 Tic-Tac-Toe in French
( ) 48 Boot for l'Hote
( ) 49 l'Hote Story
( ) 50 l'Hote Quiz
( ) 51 French Poetry Tutorial
( ) 52 Apollinaire Biography
( ) 53 Albert Camus Interview
( ) 54 Tic-Tac-Toe in Spanish
( ) 55 Rafel-Boot
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( ) 57 Rafel Quiz
( ) 58 Matute
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( ) 77 Utilities
( ) 90 Spreadsheet C Genl. Bus.
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( ) 93 VisiPlot & VisiTrend
( ) 95 Spreadsheet F-Coin Coll.
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( ) 104 Business A
( ) 106 Science Engineering
( ) 107 Games B
( ) 108 IAC 10 (Graphics)
( ) 109 IAC 11 (Applesoft Tutrl.)
( ) 110 Personal/Education
( ) 111 Games C
( ) 112 Utilities C
( ) 113 Business B
( ) 115 IAC 12/13 Misc.
( ) 117 Picture Packer
( ) 118 Utilities D
( ) 119 IAC 15 Misc.
( ) 120 IAC 16 Misc.
( ) 122 IAC 17 Misc.
( ) 123 French Vocabulary
( ) 124 Utilities E
( ) 125 IAC 18 Misc.
( ) 126 Sights and Sounds
( ) 127 Math/Science
( ) 128 Games D
( ) 130 Diversi-DOS (rev.)
( ) 131 Personal/Educ. 2
( ) 132 IAC 19 - Utilities F
( ) 133 IAC 20 - Pascal & DOS3.3
( ) 137 IAC 21 Spreadsheet A
( ) 138 IAC 23 Utilities G
( ) 139 IAC 24 Education 3
( ) 140 Education 4
( ) 141 Special Data Bases
( ) 142 IAC 28 Pinball Games
( ) 143 Sports
( ) 144 IAC 27 Applesoft Prog.
( ) 145-147)3 disks)Ap.Logo Util.
( ) 150 EDSIG1 (Elem. Math)
( ) 152 IAC 31 Miscellaneous
( ) 153 Investments A

DOS 3.3 contd.

( ) 154 Investments B
( ) 155 IAC 33 Miscellaneous
( ) 156 IAC 35 Applesoft-AW//e
( ) 157 IAC 36 Arcade Games
( ) 158 Apple Logo Programs
( ) 159 Recipe Files
( ) 160 Utilities & Games
( ) 161 Wizard Worker
( ) 162 Games E
( ) 163 Graphs and Displays
( ) 164 Games F
( ) 165 Happy Holidays
( ) 166 Charts and Graphs
( ) 167 IAC 40 - Pilot Lang.
( ) 168 IAC 41&47 - AW Util.
( ) 169 Hayes Term. Prog.
( ) 170 Love's Follies (Utilities)
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( ) 172 Print Shop Graphics
( ) 173 Riley's Pers. Instrum.
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( ) 175 No Name Yet
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Note: Eamon disks 200-229 are also available. See previous month's order form.

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( ) 818 1987 AW Tax Template, (Shareware)

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( ) 303 PIG3: ( ) 304 PIG4:
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( ) 409 Modem 730
( ) 410 Essential Utilities
( ) 411 Text Editor
( ) 412 Spreadsheet
( ) 413 MDM740(SSC&Com)
( ) 414 MDM740(7710&A-Cat)
( ) 415 Orig. 350 Pt.Adventure
( ) 416 Kermit Source Code
( ) 417 Kermit Documentation
( ) 418 Kermit Running Code
( ) 419 Util.-Z83,REZ,VDE
( ) 420 Small "C" Compiler

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( ) 1005 New Member Disk
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( ) 1011 D3. Backup
( ) 1012 Sketchpad&Slideshow
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( ) 2009 GS Fonts I
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( ) 2015 Sounds II Nostalgia
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( ) 41 Cap'n Magneto
( ) 42 Studio Session (512K)
( ) 44 Boston II Fonts
( ) 45 Games IV
( ) 46 Games V
( ) 47 Fonts IV
( ) 48.3 Fonts V
( ) 50 Paintings III
( ) 51.2 Telecom II (no sys)
( ) 54 Games VI
( ) 55 Games VII
( ) 56 Games VIII
( ) 57.1 New Memb. Disk 86
( ) 59.1 CE Sampler II
( ) 74 Fun & Games IX
( ) 75 Fun & Games X
( ) 76 Fun & Games XI
( ) 77 Fun & Games XII
( ) 78 Fun & Games XIII
( ) 79 Fun & Games XIV
( ) 80 Fun & Games XV
( ) 83 Telecom III
( ) 84 Fun & Games XVI
( ) 85 Fun & Games XVII
( ) 89 Fun & Games XVIII
( ) 91 Fun & Games XIX
( ) 92 Education II
( ) 93A & ( ) 93B Fonts VI
( ) 94 Paintings IV
( ) 95 Fun & Games XX
( ) 96 Fun & Games XXI
( ) 97 Fonts VII
( ) 99 Inits I
( ) 100 Fonts VIII
( ) 101 Fonts IX
( ) 102 Sounds I
( ) 104 Fun & Games XXII
( ) 105 Fun & Games XXIII
( ) 106 Fun & Games XXIV
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( ) 113 Fonts XII
( ) 115 Telecom IV
( ) 116 DAs XII
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( ) 123 Graphics II
( ) 124 Paintings VI
( ) 125 Sounds IV
( ) 127 Paintings VII
( ) 128 Fun & Games XXVI
( ) 129 Telecom V
( ) 131 Sounds V PeeWee+.
( ) 134 Fun & Games XXV
( ) 135 Paintings VII
( ) 143 Games XXVI
( ) 144 Sounds VI
( ) 145 Paintings IX Clip Art
( ) 146 Fonts XIII
( ) 147 New Member's Sampler
( ) 148 Sound VII
( ) 149 Painting X
( ) 150 Games XXVII-Arcade
( ) 151 Games XXVIII-Strategy

*Vol. 181 required with these disks. **Date:** _____

Note: Allow 2-3 weeks for mailing. Total Order = ____ Disks; Postage $_____; Total Amount Enclosed $_____.

Note: Mac Disks are contd. on next page.

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Washington Apple Pi, Ltd.
Attn. Disketeria
8227 Woodmont Avenue, Suite 201
Bethesda, MD 20814

Telephone _____

WAP Membership No. _____

Macintosh Disks contd.

DAs Series: (12-disk set $42) *
( ) 2.01 ( ) 2.02 ( ) 2.03
( ) 2.04 ( ) 2.05 ( ) 2.06
( ) 2.07 ( ) 2.08 ( ) 2.09
( ) 2.10 ( ) 2.11 ( ) 2.12

FKeys Series:
( ) 4.1 ( ) 4.2

Misc. Util. Series(7-disk set $24.50)*
( ) 15.01 ( ) 15.02 ( ) 15.03
( ) 15.04 ( ) 15.05 ( ) 15.06
( ) 15.07

Util. Series (9-disk set $31.50) *
( ) 16.01 ( ) 16.02 ( ) 16.03
( ) 16.04 ( ) 16.05 ( ) 16.06
( ) 16.07 ( ) 16.08 ( ) 16.09

HyperCard StackWare:
( ) 19.01 (aka 136) Utilities
( ) 19.02 (aka 137) Clip Art
( ) 19.03 Applications
( ) 19.04 Monster Hunt
( ) 19.05 Stackware for Children
( ) 19.06 Monty Python
( ) 19.07 Tutorials for Applns.
( ) 19.08 The AIDS Stack

New System 4.2 and Finder 6.0
( ) Set of 4 disks

HyperCard Upgrade 1.1 **
( ) ** Requires proof of purchase

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See page 87 for disk ordering information.

Mac II (800K):
( ) 20.01 Graphics I
( ) 20.02 GrayView & DAs
( ) 20.03 Miscellaneous
( ) 20.04 Graphics II
( ) 20.05A Ray Trace Programs
( ) 20.05B Ray Trace Source
( ) 20.06 Color
( ) 20.07 Graphics 3
( ) 20.08 Utilities I
( ) 20.09 Miscellaneous II
( ) 20.10 Image .61

WAP TUTORIAL REGISTRATION

Apple II: The following three WAP tutorials are being offered to **Apple II** owners on the first three Tuesday evenings of the month from 7:30 to 9:00 PM, at the office, 8227 Woodmont Ave., Bethesda, MD. We are experimenting with alternating the sessions between Apple IIgs and other Apple II. (The tutorials start promptly at 7:30; if you bring your computer please arrive 15 minutes early to set up.) You may sign up for any or all of the series. They are designed for the "beginner" and will be repeated monthly. The fee for each **session is $10.** You are urged to bring an Apple, monitor and disk drive. (Monitors are available for the 1st 5 registrants - call office.) Please note that WAP **does not** have equipment for you to use; if you do not bring your own, you will have to look over someone's shoulder.

( ) May 3 ( ][, //e, //c specific) - **WELCOME TO THE WORLD OF APPLE** ( ) June 7 (IIgs specific)
( ) May 10 ( ][, //e, //c specific) - **HOW TO USE YOUR APPLE SOFTWARE** ( ) June 14 (IIgs specific)
( ) May 17 ( ][, //e, //c specific) - **POPULAR APPLICATIONS: APPLEWORKS** ( ) June 21 (IIgs specific)

Macintosh: Tutorials for the beginners are regularly given on the 2nd, 3rd and 4th Monday evenings of the month at the office, from 7:15 - 10 PM. The fee for each **session is $10.** You may sign up for 1, 2, or all 3 sessions. You are strongly urged to bring your Macintosh—WAP does not have equipment for you to use. (Note to Mac II owners: You are not expected to bring your computer, but we do not have a Mac II at WAP.) These tutorials fill up quickly—call the office to verify space before mailing your registration.

( ) Monday, June 13 or ( ) July 11 - Introduction to Macintosh. Prerequisite: Guided Tour to Macintosh.
( ) Monday, June 20 or ( ) July 18 - Intermediate Mac Skills. Prerequisite: Familiarity with Desktop, disk copying, etc.
( ) Monday, June 27 or ( ) July 25 - Personalizing Your Mac for Productivity. Prerequisite: First two sessions or equivalent.

Non-Regular Tutorials: The following tutorials are being offered in the next few months. The fee for these tutorials is $15 ($20 for non-members). A more detailed description is given elsewhere in this publication or was given in a previous month.

( ) **Introduction to Applesoft (Apple II) - Bruce Field - Saturday, April 30, 9-12 am, Office.** Fee $15 ($20). Learn the fundamentals of Applesoft Basic. No programming experience necessary.

( ) **Intermediate Applesoft (Apple II) - Bruce Field - Saturday, May 7, 9-12 am, Office.** Fee $15 ($20). Continues the coverage of Applesoft Basic.

( ) **Introduction to HyperCard - Bob Platt - Saturday, May 14, 9-12 am, Office.** Fee $15 ($20). Includes browsing through stacks, creating new stacks, adding fields, buttons, etc. Bring Mac, hard disk, HyperCard, blank disks.

( ) **Introduction to HyperTalk - Holger Sommer - Saturday, June 4, 9-12 am, Office.** Fee $15 ($20). Prerequisite: Familiarity with browsing, painting, cutting and pasting buttons. Bring Mac, hard disk, HyperCard, blank disks.

( ) **HyperTalk: Advanced Problem Solving - Rick Chapman - Saturday, June 11, 9-12 am, Office.** Fee $15 ($20). Prerequisite: Introduction to HyperTalk. Examples commonly encountered in HyperTalk applications. Bring Mac, hard disk, HyperCard, blank disks.

Please check the desired tutorials and return this form with fee(s) made payable to Washington Apple Pi, Ltd. to:

Washington Apple Pi, Ltd.
Attn. Tutorials
8227 Woodmont Avenue, Suite 201
Bethesda, MD 20814

Name _____ Membership No. _____

Day phone _____ Eve. phone _____ Total Enclosed $ _____

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